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FAMILY BACKGROUND EFFECTS ON PERSONALITY DEVELOPMENT AND SOCIAL ACCEPTANCE.

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IT WAS HYPOTHESIZED THAT FOUR PRIMARY FACTORS SIGNIFICANTLY INTERACT TO AFFECT THE PERSONALITY DEVELOPMENT OF CHILDREN. THESE FACTORS WERE (1) FAMILY BACKGROUND VARIABLES, (2) PARENTAL CHILD-REARING PRACTICE AND ATTITUDE VARIABLES, (3) CHILD PERSONALITY AND SELF-CONCEPT VARIABLES, AND (4) CHILD-PEER RELATIONSHIP VARIABLES. THE PURPOSE OF THIS STUDY WAS TO INVESTIGATE THE PRESENCE OF THE INTERRELATIONSHIPS BETWEEN THE FOUR CATEGORIES OF VARIABLES. STUDENTS OF THE CASTLEBERRY SCHOOL DISTRICT NEAR FORT WORTH, TEXAS HAD PARTICIPATED FOR FOUR YEARS IN THE DISTRICT'S PEER RELATIONS PROGRAM. SOCIOMETRIC RATING SCORES WERE THUS AVAILABLE FOR A LARGE GROUP OF STUDENTS. THESE SCORES REPRESENTED A CHILD'S RATING ACCORDING TO HIS PEERS AND TEACHERS. BOYS AND GIRLS IN GRADES SIX, SEVEN, AND EIGHT WHO PLACED HIGH OR LOW ON THE SOCIOMETRIC RATING SCORE WERE THE SAMPLE POOL. THE PARENTS OF THESE CHILDREN WERE SOLICITED FOR PARTICIPATION IN THE STUDY AND WHEN 100 FAMILIES AGREED TO PARTICIPATE, THE SAMPLE WAS CLOSED. THE PARENTS AND CHILDREN WERE SUBSEQUENTLY ADMINISTERED A BATTERY OF INTERVIEWS, QUESTIONNAIRES, TESTS, AND RATING FORMS CONCERNING VARIABLE-CATEGORIES (1), (2), AND (3). THE RESULTS OF THESE DATA, PLUS THE SOCIOMETRIC RATING DATA USED IN SELECTING THE SAMPLE, WERE ANALYZED TO OBTAIN THE EXISTENCE OF THE INTERRELATIONSHIPS, IF ANY. SIGNIFICANT INTERRELATIONSHIPS BETWEEN THE FOUR GROUPS OF VARIABLES WERE FOUND TO EXIST. FAMILY BACKGROUND FACTORS WERE ASSOCIATED WITH VARIABLES AT EACH OF THE OTHER THREE LEVELS. FAMILY TENSION, A VARIABLE UNDER CATEGORY (2), HAD A DISRUPTING INFLUENCE ON CHILD-REARING PRACTICES, THE CHILD'S PERSONALITY DEVELOPMENT, AND SOCIAL ACCEPTANCE OF THE CHILD BY PEERS. ANOTHER CATEGORY (2) VARIABLE, PARENTAL LOVE OR REJECTION, ALSO INFLUENCED THE CHILD'S CHARACTER AND SOCIAL ACCEPTANCE. (WD)

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FAMILY BACKGROUND EFFECTS ON PERSONALITY DEVELOPMENT AND SOCIAL ACCEPTANCE

ED020020

Samuel H. Cox, Ph.D.

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FOREWORD

The study reported in this volume is impressive on at least three counts. Most important is the theoretical and practical significance of the relationships studied. The Linkage of family background, child-rearing attitudes of parents, personality and self-concepts of children, and acceptance-rejection by peers marks an important advance in a field in which scientific knowledge to guide social and educational intervention is sought more intensely than ever before.

The results of this study constitute a major contribution to scientific knowledge of child development. At the same time, the approach followed in obtaining the cooperation of schools and families as participants and subjects was a model for investigators of significant human problems, at a time when restrictions on such investigations are becoming acute. As a result of a carefully planned series of preparatory consultations with school board members, school officials, and parent-teacher groups, at which research objectives, methods, and the significance of the expected outcomes were frankly and fully outlined, the friendly cooperation of schools and families was obtained and the conduct of the research expedited. It is a pleasure to salute the school officials and parents of the Castleberry School District for their insightful and critical questions and their enthusiastic cooperation in this research after they were convinced that the results might produce information of scientific value in the area of child-rearing.

Finally, the magnitude of the research, in terms of the volume of data collected, processed, and analyzed, was exceptional, particularly when viewed in the frame of reference of a doctoral dissertation. As major professor for the dissertation and as co-principal investigator, with Professor Merrill Roff of the University of Minnesota, of the Peer Relations Study (USOE Contract No. 2-10-051), under which this study was conceived and supported, I am doubly satisfied with this contribution by Dr. Cox, who has been Project Director of the Peer Relations Study since 1963.

S. B. Sells, Ph.D.
Professor of Psychology and
Director, Institute of
Behavioral Research

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ABSTRACT

A network of background factors was hypothesized to affect personality development, and a complex of background and personality characteristics was hypothesized to influence acceptance-rejection by peers. Data were gathered on 100 families to measure variables at four levels: (A) Family background including social factors, (B) Parental child-rearing attitudes and practices, (C) Characteristics of the child, and (D) Social acceptance of the child by his peers. Results indicated that: (1) pivotal linkages were established throughout the hypothetical network of relationships; (2) family background factors were associated with variables at each of the other levels; (3) family tension had a disrupting influence on child-rearing practices, the child's characteristics, and on the social acceptance of the child by peers; (4) parental loving-rejecting showed influence on the child's personality development and social acceptance; (5) parental disagreement influenced the child's personality development in a wide area, especially that of ego development; and (6) the stimulus value of the child, in terms of his personality traits and characteristics, was the principle determinant of peer acceptance-rejection.

CHAPTER I

STATEMENT OF THE PROBLEM

The study reported here is a multivariate developmental study of the effects of several major factors in family background on the personality development and social acceptance of the child. It was undertaken as an independent investigation within the general framework of the research program on peer relations and personality development, directed jointly by Professors S. B. Sells of Texas Christian University and Merrill Roff of the University of Minnesota, under U. S. Office of Education Cooperative Research Contract No. 2-10-051.

Previous research in the Peer Relations Study and by others, reviewed in the next chapter, has demonstrated the importance of family background in relation to peer acceptance-rejection of school children, which is in turn related to subsequent social adjustment. However, the specific factors that mediate peer acceptance-rejection are still only vaguely identified. The purpose of the present study is to try to bring certain of the more salient of these factors into sharper focus. Although the range and number of relevant biological, cultural, familial, and social factors are recognized to be extensive, those selected for careful study in this investigation are of particular interest because of their relation to significant past research reported in the literature and also because they appear to represent pivotal aspects of several related classes of variables that together form a conceptually related network.

Among the distinguishing features of this study are the following: (1) It is a field study based on families living in a community. While this has the advantages of realism, it involves the difficulties of obtaining cooperation from the families involved and of obtaining useful information in many areas in which the privacy of the respondents must be protected. (2) It is observational and descriptive rather than manipulative. Manipulation of critical variables, such as parental love and protection is not feasible in the reality situations under study, but such variations as do occur in their natural settings may be interpreted by the multivariate statistical designs employed. (3) It is multivariate, attempting to achieve control of the influence of many variables through statistical analysis rather than by experimental control which, under the circumstances, would be tantamount to ignoring them. In view of the time perspective and complexity of the social environments represented in the variables under study, it is believed that the approach outlined is not only appropriate but preferred.

The family background effects selected for analysis in this study are represented by two sets of variables. These are, first, the family social level, which includes all of the factors which define socioeconomic status, education of parents, and social status in society, the latter inferred on the basis of socioeconomic and educational status, and second, the attitudes and behavior of the parents in the rearing of their children, which represent another complex embracing the emotional atmosphere of the home and the child-rearing skills and attitudes of the parents. These are believed to be interrelated and to influence the personality of the child. All three sets of variables, the two background sets and the personality of the child, in complex interaction, are hypothesized to affect the acceptance or rejection of the child by his peers.

Thus, a network is hypothesized among four levels of variables, as follows: (1) family background and social factors, (2) parental child-rearing attitudes and practices, (3) characteristics of the child, and (4) social acceptance of the child by his peers. This network is believed to be hierarchically organized and to be predictable by the use of appropriate measurements and analytic methods. In the present study, however, only strategically selected, pivotal variables are employed to represent each major source of variance. As a result, some of the main lines of influence may be described, but, due to the selectivity imposed, one can expect to account for only a modest percentage of the total variance of the developmental process under examination.

Although a vastly greater number of relevant dimensions is involved at each level, implying a more extensive and complex network of relationships than investigated here, the plan of the present study is expected to fit into the broader framework and is believed to represent a move toward the understanding of these complex relationships.

As indicated in the following review of the literature, several of the linkages in the network of interrelations among these four levels have received extensive empirical attention, while others appear to have been largely ignored at the empirical level, although mentioned in theoretical formulations.

Briefly, the empirical research concerning these four categories of variables in the systematic network of interrelationships indicated the following:

a. Social level of the family has been related to variables at each of the other levels; the research has been intensive and the results appear to be remarkably consistent.

b. Parental attitudes and child-rearing practices have been related to the child's personality, behavior patterns, and adjustment; while the research in this area seems relatively consistent, many of the studies are subject to criticism and the results appear to warrant further confirmation. No research has been reported on the relation of parental attitudes or child-rearing practices to the attitudes of acceptance or rejection of children by peers.

c. The relations between the child's personality, behavior patterns, and adjustment and a variety of sociometric choice patterns have been investigated. However, the empirical evidence in this area is inadequate and fails to reflect concern with the concept of acceptance-rejection.

CHAPTER II

BACKGROUND: REVIEW OF LITERATURE

This review is organized to reflect the matrix of relationships which make up the network of background and individual factors which affect peer acceptance-rejection.

SOCIAL LEVEL

Parental Attitudes and Behaviors

One of the more widely cited research reports on parent-child relations (Sears, Maccoby & Levin, 1957) indicates that as many as five demographic factors--social class, education, mother's age, ethnicity, and family size--have some influence on the mother's choice of child-rearing methods. These authors examined the differences in child-training practices between mothers ($N = 372$) of two social classes. Their findings indicated that working class mothers were rated significantly higher than middle class mothers on the following variables: severity of toilet training, punishment for dependency, severity of punishment for aggression toward parents, restrictions on care of house and furniture, pressure for neatness and orderliness, strictness about bedtime, father's demands for instant obedience, importance of the child's doing well in school, use of ridicule, use of physical punishment, and showing some rejection of the child. On the other hand, middle class mothers were rated significantly higher than working class mothers on the following scales: age child completes bowel training, permissiveness for dependency, sex permissiveness, permissiveness for aggression towards parents, expecting child to go to college, mother's warmth to the child, mother "delighted" over pregancy, and mother's esteem for father. It seems worthwhile to note that several variables which seem to have theoretical importance as child-rearing practices were not related to social class as measured in this study; these include: permissiveness for aggression toward neighborhood children, keeping track of the child, amount of infant caretaking by a person other than the mother or father, father's warmth to child, parent's disagreement on child-rearing policies, and the member exercising family authority.

Roe and Siegelman (1963) administered their Parent-Child Relations Questionnaire (PCR) to 132 Harvard students and examined relations of factor scores on three dimensions--Loving-Rejecting (LR), Casual-Demanding (CD), and Overt concern for the child (O)--with religious background and socioeconomic position of family. Comparisons on religious background were confined to Protestant (N = 79) and Jewish (N = 49) subjects. Factor O was significantly higher for both parents for those with Jewish backgrounds. Factors LR and CD were not significantly different for either parent. Socioeconomic level did not differ with religion.

The father's occupational status, rated on a six-point scale ranging from (1) old American families, usually wealthy, to (6) skilled workmen, was employed as the measure of socioeconomic status by Roe and Siegelman. Factor LR, but neither O nor CD, varied consistently with SES ratings. The data suggest that the higher the socioeconomic level, the more loving the parents. These findings are consistent with, and in the same direction as, those reported by Sears et al. (1957).

Research has been reported that middle-class mothers interact more with their children than do lower-class mothers. Direct observations were made of 17 categories of parent-child interactions; 9 categories were significantly related to social class (Zunich, 1961).

In an extensive longitudinal study, mother's educational level was significantly correlated with ratings of maternal behavior for variables defined as restrictiveness, hostility, and acceleration (Kagan & Moss, 1962).

Droppleman & Schaefer (1963) studied perception of parental behavior in two samples of children which differed in religion and social class. The results suggest that these variables may have influenced the differences found between the two samples.

In a recent review of the literature, Caldwell (1964) stated:

> Social class differences in patterns of child raising are generally formed, with the controversy regarding identification of which group is more permissive decided for the time being in favor of the middle class. However, the differences found in several studies are of such small magnitude as to be, for all practical purposes, meaningless. Furthermore, associated differences in child behavior have received insufficient attention. In the preoccupation with demonstrating that children from different social classes have different patterns of family life, research designed to demonstrate the effects on young children of these patterns has been neglected (p. 81).

Characteristics of the Child

Numerous studies (Cronbach, 1960; Hilgard, 1962, p. 407; McCandless, 1961, pp. 218-25; Mussen & Conger, 1957) of the relation of social class to such characteristics of the child as intelligence test scores, school achievement test scores and teacher's grades have demonstrated that lower-class children score lower than middle- or upper-class children.

Social Acceptance of the Child

A number of investigators (Campbell, 1964; Gronlund, 1959; Roff & Sells, 1965; Thompson, 1952; Wall, 1960) have reported significant relationships between measures of family social level and patterns of sociometric choice which suggests that sociometric choices are related to social class measures in much the same way that intelligence measures are related to social class measures.

According to Gronlund,

> The social structure of the community, the family experiences provided in the home, the residential prox-

> imity of children's homes in the community, and social cleavages between rural-urban, racial and religious groups, all seem to have some influence on children's sociometric choices. The influence of any of these factors is difficult to evaluate because of the diverse populations studied, the lack of sufficient controls in most of the studies, the interrelatedness of the various factors, and the contradictory results reported by the various investigators (1959, p. 220).

However, Gronlund indicated that several generalizations were warranted: (a) sociometric choices of children in school reflect the attitudes and values in the community; (b) that such factors have the greatest influence on sociometric data when the child is asked to name his _actual_ friend and least influence when asked to choose a _preferred_ associate; and (c) that the interpretation of sociometric data must take into account the possible influence of social factors.

FAMILY BACKGROUND FACTORS

Social Acceptance of the Child

In their paper presented at the 1964 APA meeting, Sells and Roff (1964a) cited unpublished research relative to the problem of family influence on children's behavior. School personnel provided open-end comments on the family backgrounds of 685 high, middle, and low peer status children in six Texas school districts. Highly significant associations were found between peer acceptance-rejection, measured by a weighted combination of positive and negative choices and the teacher's estimate of acceptance, and the following variables: family on welfare rolls ($p < .01$), family mobility ($p < .001$), bilingualism in family ($p < .02$), history of serious illness in the family ($p < .001$), disrupted parental relations ($p < .01$), father in military service ($p < .001$), and low educational level of family ($p < .001$).

PARENTAL ATTITUDES AND BEHAVIORS

Characteristics of the Child

The influence of parents on the mental health of a child was originally stressed by Freud (1937), later emphasized by Sullivan (1947, 1953), and seems now to be widely accepted and generally supported by empirical research. In their review of the research literature, however, Hoffman and Lippitt (1960) noted that "there is no paucity of theories to explain the effects of the family on the child, but there is a paucity of empirical research connected with those theories" (p. 947).

The studies reviewed here are classified into two broad categories, those which employed observational methods and those which emphasized the use of questionnaires or self-ratings to assess parental attitudes and behaviors.

Observational Studies.--Thirty years ago Hattwick (1936) reported a number of correlates of adverse behavior with home conditions. For example, observed nervous habits of children correlated .41 with ratings of quarrelsome mothers, .36 with ratings of impatient mothers, .46 with ill mothers, -.44 with happy mothers, and -.35 with what was called a calm home. Additionally, he reported observations of children grabbing toys which correlated .65 with quarrelsome mothers and -.34 with calm homes.

Baruch and Wilcox (1944) used the clinical interview technique to investigate the nature of interpersonal tension among parents of 76 preschool children on whom observational ratings of maladjustment were made. They found significant degrees of interparental tension in the following areas coexistent with maladjustment of the child: (a) tension over a lack of sexual satisfaction ranked highest (CR = 9.93); (b) tension over a feeling that enough consideration, sympathy, or the like was lacking ranked next (CR = 6.56); (c) the third ranking tension involved a lack of expressed affection on the part of the mate (CR = 4.02); (d) the inability to talk things over ranked as the next tension (CR = 3.53); and (4) the least significant factor involved tension over ascendance-submission (CR = 3.06). These results further suggested that interparental tensions have differential affects, depending on the sex of the child.

A number of factor analytic studies have been reported describing the dimensions of child-rearing characteristics of parents (Becker, 1964; Loevinger & Sweet, 1961; Lorr & Jenkins, 1953; Roe & Siegelman, 1963; Roff, 1949; Schaefer, 1961; Sears _et al_., 1957). The Sears _et al_. study reduced 44 scales to 7 factors, including: A--Permissiveness-strictness; B--

General family adjustment; C--Warmth of mother-child relationship; D--Responsible child-training orientation; E--Aggressiveness and punitiveness; F--Perception of husband; and G--Orientation toward child's physical well being. The authors state:

> Because the main problems we were investigating did not require measurement of the overt social behavior of the children, we limited our non-fantasy child behavior measures to those which could be secured through the mothers' own reports (p. 482).

Keeping the foregoing limitation of their study in mind, Sears *et al*. examined associations between the personality of the mother and the mother's report of the child's behavior. The only measure of child behavior which was not associated with mother's warmth was dependency. An argument was presented to support the findings and a hypothesis was offered "that children of warm mothers mature more rapidly, in their social behavior, than those of cold mothers" (p. 484). Another characteristic, the amount of punishment employed, was found to be essentially "a measure of a personality quality of the mothers. Punitiveness, in contrast with rewardingness, was a quite ineffectual quality for a mother to inject into her child training" (p. 484). The evidence regarding punishment which is most relevant to the present study includes:

> Mothers who punish dependency to get rid of it had more dependent children than mothers who did not punish. Mothers who punished aggressive behavior severely had more aggressive children than mothers who punished lightly. Harsh physical punishment was associated with high childhood aggressiveness (p. 484).

They also found that permissiveness toward aggression tended to encourage the continuance of aggressive behavior.

Sears (1961) followed up a sample of 76 boys and 84 girls from the original study, discussed above, by administering five self-report scales of aggression (antisocial, prosocial, projected, self-aggression, and aggressive anxiety). Intersex comparisons showed higher scores for boys on antisocial aggression and higher scores for girls on aggressive anxiety and prosocial aggression. Comparison of ratings of mother interviews, obtained six years earlier, with these measures of aggression indicated that antisocial aggression is positively related to high permissiveness and low punishment. The findings regarding permissiveness were consistent with those relative to aggression in the home at age 5 (maternal report). However, at age 5, high punishment was related to aggression, while at age 12, a negative relationship was found between punishment and aggression. Sears states "At the earlier period punishment incited aggression, preponderantly, while at age 12 the negative correlations are interpreted as exemplifying the inhibitory influence of punishment" (1961, p. 492). Prosocial aggression and aggression anxiety were related to high permissiveness and high punishment. Self-aggression in boys was most evident in those who had been severely controlled in their early years. Important sex differences were found in antecedents for aggression anxiety.

A 25-year longitudinal study of 89 subjects reported by Kagan and Moss (1962) considered as a secondary objective the effect of four maternal practices on the child's behavioral development. Maternal protection included: overconcern when the child was ill, encouraging dependency, rewarding requests for help, and unnecessary nurturance. Maternal restrictiveness included primarily punishment for deviation from maternal standards. Maternal hostility included: active rejection, neglect, or criticism of the child or preference for a sibling. Maternal acceleration assessed excessive concern over the child's cognitive and motor development.

Their findings with respect to dependency indicated that maternal protection of boys before age 3 years predicted passive and dependent behavior during the school years. Boys whose mothers were restrictive before age 3 years were "minimally dependent on love object or friends as adults" whereas restrictiveness during age 3 to 6 years was slightly and positively associated with "dependence on love object in adulthood" (p. 212).

The absence of a relationship between restrictiveness of sons for these two age periods suggested that mothers shifted in degree of restrictiveness toward sons over the first six years and led to a conclusion that "apparently restrictiveness during the first three years has different consequences than restrictiveness during the preschool and school years" (p. 212). Restriction of girls was associated with dependence and passivity during childhood but not in adulthood. Maternal hostility was minimally associated with dependence for boys; hostility toward girls "predicted independence with love objects and a reluctance to withdraw from stress during the adult years" (p. 213).

The relation of maternal practices to achievement behavior indicated that protection for boys before age 3 years was one of the best predictors of child and adult intellectual achievement.

In their comparison of maternal treatment and aggressive behavior Kagan and Moss indicated "There were no consistent associations between maternal treatment of sons during the first six years and the child's aggression toward his mother" (p. 223).

All measures of aggression in the Kagan and Moss study (1962) consisted of interviewers' ratings based on judgments and observations. Maternal practices during the first six years were not consistently related to peer-directed aggression. Protectiveness before age 3 years predicted conformity to adult authority during age 6 to 10 and 10 to 14 for boys and for girls suggesting that maternal protection provides the conditions for socialization of rebellious tendencies. Maternal restrictiveness was the most consistent correlate of aggressive behavior in adult men and women. Maternal hostility was the best correlate of aggression toward peers during childhood.

Some additional findings reported by Kagan and Moss (1962) include: "Protection of sons was the major predictor of non-masculine sex-role interests in boys" (p. 225). Hostility toward girls before age 3 years predicted low social anxiety as adults. Restrictiveness for sons during age 10 to 14 years was associated with adult social anxiety. Compulsivity in childhood was positively associated with maternal protectiveness for both boys and girls before age 3 years.

In a seven-year longitudinal study (Peck & Havighurst, 1960), 34 children, ages 10 to 17 years, were tested, interviewed, and rated by peers. One of the central objectives of their investigation involved the relationship between familial patterns and the child's developing personality, especially his moral character or conscience development. On the basis of the accumulated information, each subject was evaluated on a variety of personality and moral standard variables (ego strength, superego strength, spontaneity, friendliness, hostility-guilt, and moral stability). In addition, the families were rated for four kinds of practices: consistency, democracy, mutual trust, and severity.

The major findings suggested that: ego strength was associated with consistent and trusting parents; friendliness and spontaneity were related to democratic and trusting parental attitudes, and hostility and guilt were associated with autocratic and untrusting parental attitudes.

With N = 34, Spearman's rho was used to intercorrelate ten characteristics of the family. The resulting factor analysis produced four factors interpreted as F1, Consistency of Family Life; F2, Democracy-Autocracy; F3, Mutual Trust and Approval among Family Members; and F4, Parental Severity (Peck & Havighurst, 1960).

McCord et al. (McCord, McCord & Howard, 1963) had trained researchers classify each boy in the Cambridge-Somerville Youth Study and each parent on variables ranging from occupation and religion to affectional interaction. It was presumed that rejection, punitiveness, and the use of threats would increase aggressive drive; on the other hand, supervision, parental agreement, consistent discipline, high expectations and religious training were assumed to produce a controlled environment. Fathers were classified as providing a deviant or a nondeviant model. Criminals and alcoholics were designated as deviant models.

The results indicated that high drive and a deviant model produced aggressive-antisocial men ($p < .001$), regardless of controls; moderate drive, a deviant model, and high controls produced aggressive-antisocial men ($p < .001$); moderate drive and low controls, regardless of the model, produced aggressive-socialized men ($p < .001$); and low drive and high controls, regardless of the model, produced non-aggressive men ($p < .001$) (McCord, McCord & Howard, 1963, pp. 240-2). It was noted that a mother who attended church or mass once a week was assumed to provide religious training. Other variables--intelligence, religious affiliation, neighborhood, father's birth place--were not related to antisocial or socialized aggressiveness.

Becker et al. (1959) investigated the aspects of parental behaviors related to behavior disorders in children. Their findings, based upon separate analyses for fathers and for mothers, indicated that conduct problems in the child coincided with Roff's (1949) Parent-child harmony factor. The patterns of loadings indicated that in families with conduct problem children, both parents were maladjusted, gave vent to unbridled emotions, and tended to be arbitrary with the child. In addition, the mother of a problem child tended to be tense, dictatorial, and thwarting whereas the father tended not to enforce regulations. A factor defined primarily by personality problems in the child (shy, sensitive, inferior), on the other hand, showed associations only with father ratings as maladjusted and thwarting of the child. The authors concluded that future research should give more consideration to the role of the father in child development.

Parental Attitude Questionnaires.--One of the earliest attempts to develop a scale to assess parental attitudes and to examine their influence on child development was reported by Shoben (1949). His scale was developed initially on a sample of 50 mothers of problem children and 50 mothers of non-problem children. Judgments of experts were used to classify each item by attributes of mothers. This procedure yielded four sub-scales: Dominant, Possessive, Ignoring and Miscellaneous. Replication on a sample of 20 mothers of problem children and 20 mothers of non-problem children yielded significant point-biserial correlations which discriminated between problem children and non-problem children (Total scale .77, Dominant .62, Possessive .72, and Ignoring .62).

Mark (1953) administered the scale developed by Shoben to 100 mothers of male schizophrenics and 100 mothers of male non-schizophrenics. The attitudes of the two groups of mothers differed significantly with respect to child-rearing practices. Of the 139 items of the scale, 67 differentiated between the two groups of mothers beyond the .05 level. Mothers of schizophrenics tended to be very restrictive in control of the child. Regarding warmth of the mother-child relationship, the mothers of schizophrenics tended to be either excessively devoted or cooly detached.

Bronfenbrenner (1961) reported differential effects of child-rearing practices related to the sex of the parent and the sex of the child. Girls were reported to perceive their parents as giving them more affection, praise, and companionship than did boys; boys reported their parents as being more punishing and demanding with respect to achievement than girls. The process of socialization, according to Bronfenbrenner, entailed somewhat different risks for the two sexes. Girls were especially susceptible to the detrimental incluence of over-protection; boys to the ill effects of insufficient parental discipline and support, "boys suffered more often from too little training, girls from too much" (p. 92). Both extremes of either affection or discipline were deleterious for all children; the influence of affection or discipline on the children's behavior was curvilinear.

Heilbron and McKinley (1962) studied 58 female college students having t-scores above 70 on two MMPI scales and 52 female college students with no t-scores higher than 60 on any scale of the MMPI. The former group was designated as the Incipient Psychopathology Group (IP), the latter as the Control Normal Group (CN). The Parent Attitude Research Instrument (PARI) was administered to each subject.

The results indicated: The IP subjects perceived their mothers as more authoritarian and controlling than CN subjects; IP subjects perceived mothers as more hostile and rejecting than CN subjects. Of the 21 scales of the PARI, the two groups differed significantly ($p < .05$) on seven.

The IP groups perceived their mothers as more seclusive, higher on "Breaking the Will," inconsiderate of husband, more accelerative of development, having more marital conflict, more irritable, and more often rejecting her role as homemaker. Three PARI variables--Breaking the Will, Acceleration of Development, and Dependency of Mother--were negatively correlated with the subjects' ($N = 108$) intelligence ($p < .05$).

Droppeman and Schaefer (1963) investigated boys' and girls' reports of father's and mother's behavior. A parent behavior inventory was administered to 85 boys and 80 girls of the seventh grade in a Catholic school. Their findings indicated that girls reported receiving more love, affection, and nurturance than boys from both the father and the mother. Boys reported receiving more hostile, negative treatment from both parents.

A second study was undertaken by Droppleman and Schaefer (1963) in an effort to replicate the one cited above, using a different instrument and eleventh grade, Protestant, public school children (36 boys and 34 girls). Although similar clusters of parental behaviors were found in both studies, there were no significant differences between boys and girls for either parent, except that girls reported receiving more psychological control from mothers than did boys.

Schaefer has suggested that "A child's perception of his parents' behavior may be more related to his adjustment than is the actual behavior of his parents" (1965). A group of 85 boys (Catholic, white, seventh grade) was labeled normals and compared with a group of 81 institutionalized boys labeled as delinquents. Parent behavior inventories were administered to both groups. Twenty-six of 52 differences were found to be significant beyond the .05 level. The delinquents described both parents as higher on Extreme Autonomy and Lax Discipline, and mothers as being more positive and loving but fathers as less positive and less loving than did the normal group. The delinquents described extremely different patterns of behavior for mothers than for fathers while normals reported very similar behavior for mothers and for fathers. The author pointed out that the results justify a separate analysis of maternal and paternal behavior.

Siegelman (1965) used the Roe-Siegelman PCR Questionnaire to investigate the association of introversion-extroversion and anxiety, as measured by the Cattell 16 PF, to dimensions of child-rearing practices. The male subjects' (N = 54) perception of the father and the mother as loving was related to both introversion-extroversion and to anxiety. The female subjects' (N = 93) perception of the father as loving was related to introversion-extroversion but not to anxiety; their perception of the mother as loving was not significantly related to either anxiety or to introversion-extroversion. The Casual-Demanding dimension was related to neither introversion-extroversion nor anxiety for either the male or female samples. In addition, this study served to verify the earlier study (Roe & Siegelman, 1963) by producing the dimensions of Loving-Rejecting and Casual-Demanding with an independent sample of college students.

Medinnus (1965) administered measures of self-acceptance, adjustment, and the Roe-Siegelman Parent-Child Relations Questionnaire to 44 college students. He found that adolescents (mean age 18 years) with favorable scores on measures of self-acceptance and adjustment were likely to perceive their parents as loving but not as neglectful or rejecting.

Social Acceptance of the Child

Research reports concerning this area of relationships were extremely limited, and none specifically related to the association of parental attitudes and behaviors to peer acceptance-rejection could be found. Over a quarter of a century intervened between the two reports cited here.

Hattwick and Stowell (1936) reported research which indicated that children whose parents were over-attentive had only one chance in five of making a good social adjustment while those who were described as being from well-adjusted homes had seven chances out of ten of making a favorable social adjustment.

Winder and Rau (1962) studied parental attitudes as they related to social deviance of pre-adolescent boys. Social deviance was defined by extreme scores on five scales (Aggression, Dependency, Withdrawal, Depression, and Likeability) on a Guess Who type of questionnaire. The Stanford Parent Attitude Questionnaire was administered to 108 fathers and 118 mothers. Five measures of parent attitudes (Ambivalence, Permissiveness, Demands for aggression, Restrictiveness, and Low maternal self-esteem) differentiated between deviant and non-deviant boys. In addition, it was found that the mothers of popular boys reported high parental adjustment and fathers gave more favorable evaluations of their boys' competence. These results further indicated that the father plays an important role in the development of deviant behavior and makes a unique contribution to the development of aggression in boys.

Gronlund noted an obvious lack of studies concerning the association of parent-child relations to patterns of sociometric choice and stated that:

> It is surprising that so many sociometric studies neglected this important area and were concerned with family size, position in family, and other objective, but relatively unimportant factors. Future research in this area should throw light on the extent to which various types of parent-child relationships influence children's sociometric choice patterns (1959, p. 214).

CHARACTERISTICS OF THE CHILD

Intelligence.--Correlations of differing measures of intelligence suggest that between 5 and 30 per cent of the variance of sociometric ratings can be accounted for by intelligence. One of the earlier studies of this relationship (Jenkins, 1931) reported a correlation of .30 with IQ and .42 with MA on the Stanford-Binet for 197 friends. In a study of 29 pairs of repeatedly chosen friends, Seagoe (1933) obtained correlations of .51 for IQ and .67 for MA. For a study of 259 third, fourth, and fifth grade children, Bonney (1944) reported correlations between measures of social acceptance and IQ of .34 (third grade), .31 (fourth grade), and .45 (fifth grade). Barbe (1954) studied peer relations of children of differing intellectual levels and found that slow learners were infrequently chosen as friends. In a study of 139 nine-year-olds Tolor and Tolor (1955) found significant differences between sociometrically popular (IQ 105) and sociometrically less popular (IQ 84) children.

Personality.--Seagoe (1933) put the sociometric question of "Whom would you invite to go to a party with you?" to 142 fifth to eighth grade pupils. Choices were significantly correlated with athletic ability (.35), courtesy (.30) cleanliness (.47), and sportsmanship (.23).

In a comparison of sociometrically defined "isolates" and "populars," Young and Cooper (1944) found popular children to be significantly better adjusted, as measured by the California Test of Personality, than isolates. They found the popular children to be more extroverted ($p < .01$) and more stable emotionally ($p < .01$). For each of the scales of the California Test of Personality, they found significant ($p < .01$) differences in favor of the popular children on self-reliance, sense of personal worth, personal freedom, feeling of belonging, freedom from nervous symptoms, social standards, social skills, family relations, school relations, and community relations. The two groups did not differ significantly on freedom from antisocial tendencies.

Ten of the more frequent reasons given by 487 sixth grade pupils (Austin & Thompson, 1948) for choosing friends were listed as: cheerful, frequent association, nice and friendly, similarity of interests, kindness, cooperative, generous, honest, even-tempered, and physical appearance. The per cent of children indicating a particular reason ranged from 4 for physical appearance to 12 for cheerful.

In a factor analysis of a Guess Who questionnaire, Mitchell (1956) found three factors which he interpreted as Social Acceptability, Aggressive Maladjustment, and Social Isolation. Factor I, Social Acceptability, was loaded on such items as: those who make good plans (.82), good leaders (.88), understand easily (.90), work for the good of the class (.87), smart at games (.92), most popular (.89), have ideas for things to do (.89), and best friend (.78). Factor II, Aggressive Maladjustment, correlated with such items as: rule breakers (.74), complainers (.92), those who steal and lie a little (.61), quarrelers (.68), and those who are mean and cruel (.76). Factor III, Social Isolation, correlated with too shy to make friends easily (.49), not liked for best friend (.62), not noticed or thought about (.62), timid (.35), upset when called on to recite (.51), stay out of games (.36), and those who steal and lie a little (.56).

Wall (1960) selected a sociometrically defined peer-rejected and peer-accepted child from each classroom and administered the Michigan Picture Test to each subject. For the sample of 100 children, equally divided as to sex, he found no differences as to total needs expressed. For girls, the only need which discriminated between the two groups was that of extrapunitiveness; the same variable discriminated peer-rejected from peer-accepted boys. In both instances there was a higher incidence of extrapunitiveness in the peer-rejected group. In addition, accepted boys verbalized more "love" needs and more "submissive" needs than did the peer-rejected boys.

The Peck and Havinghurst (1963) study, cited earlier, used a Guess Who type of peer rating to assess the subject's social reputation. Maturity of character (as assessed by the research staff) was significantly correlated with peer ratings of: Warmth (.57), Participation (.51), Dominance (.44), Emotional Stability (.61), and Moral Courage (.67).

Behavioral Observations.--Koch (1933) obtained peer ratings of 17 four-year-old subjects by presenting to each singly all possible pairs of children in the class and asking which one of the pair they liked. Time samples of behavior were taken and these measures were correlated with peer ratings. Some of the reported correlates of peer ratings were: strike others (-.60), escape reactions (-.69), refuse children (-.75), accept situation (.51) and tattle (.48).

Bonney and Powell (1955) compared ten sociometrically high and ten sociometrically low children and found significant differences on six of 25 behavioral categories. Children in the high group smiled more, made more voluntary contributions to the group, and were more cooperative in group activities. The low group manifested nonconforming behavior which was not directed against a particular child, engaged in more bodily self-contact, and engaged in more solitary physical activity.

Echelberger (1959) studied the relation of teacher ratings of behavior to sociometric ratings by peers. Using the Haggerty-Olson-Wickman Behavior Rating Scale, significant correlations were found between sociometric ratings of popularity and a behavior problems scale, a social adjustment scale, and an emotional adjustment scale for 64 children, grades 1 to 3, and 72 children, grades 4 to 6.

Lippitt and Gold (1959) used a quantitative behavior schedule to record observations of children in a standardized classroom situation. Behavior was classified into five categories and the per cent of low peer status children was computed and compared with the per cent of other children in each behavioral category. More low peer status children than other children were found to exhibit behavior classified as Active-Assertive, unfriendly, and Passive, unfriendly, and fewer low peer status children were classified as Active-Assertive, friendly. There were no differences between low peer status and other children for the Neutral or Passive, friendly, categories.

SOCIAL ACCEPTANCE

Emotional Handicap--In his monograph Bower (1960) included inability to build or maintain relations with peers or teachers as one of five elements in his definition of emotionally handicapped children. The other four elements include: an inability to learn not explainable by intellectual, social, or health factors; inappropriate types of behavior or feelings; a pervasive mood of depression or unhappiness; and the tendency to develop physical symptoms, or fears, associated with personal or school problems.

The sample studied by Bower included classes in which there was at least one child, who could be clinically designated as emotionally handicapped, in each of 200 fourth, fifth, and sixth grade classes. The data collected on each child in the class included: chronological age, school absences, father's occupation, reading and arithmetic achievement test scores, IQ test score, a score on a personality questionnaire (Thinking About Yourself), a score on a sociometric technique (A Class Play), and teachers' ratings of physical and emotional characteristics (1960, p. 36).

In a summary of the findings, Bower (1960, pp. 61-2) indicated that the clinically determined emotionally handicapped children differed from their classmates as follows:

1. The emotionally handicapped children scored significantly lower on group IQ tests;

2. The emotionally handicapped children scored significantly lower on achievement tests in reading and arithmetic, and difference increased with school grade;

3. The emotionally handicapped boys perceived themselves significantly more negatively than did other boys. Emotionally handicapped girls showed less dissatisfaction with self than did other girls;

4. On the sociometric technique, other children tended to designate emotionally handicapped children as hostile or inadequate. Emotionally handicapped children were selected for negative roles;

5. There was no significant difference with respect to socioeconomic level based on father's occupation;

6. Teachers rated 87 per cent of the clinically identified emotionally handicapped children as among the most poorly adjusted children in the class group.

In reference to the sociometric method, A Class Play, Bower stated that it

> . . . is a highly valid instrument for screening emotionally handicapped children. For boys, 14 to 15 items were found to discriminate between emotionally handicapped and others; for girls, 10 out of 15 were found to discriminate. If only one method for class analysis were permissible, this would undoubtedly be the best single procedure (1960, p.55).

Social Adjustment.--Northway's conceptual model provided for the classification of peer-rejected children into three categories on the basis of observable behavioral traits: (1) socially ineffective, (2) socially uninterested, and (3) recessive. The three classifications are discussed below.

Children categorized by Northway (1960, pp. 455-61) as socially ineffective children seemed to manifest behavior which parallels that which might be classified as aggressive. She reported their superficial behavior as often "noisy, rebellious, delinquent in classroom affairs, boastful and arrogant," as a "nuisance to the teacher and the life of the classroom," and theorized that such behaviors arise from "rather ineffective, naive attempts to overcome the basic social insecurity and isolation from group life which they experience." According to Northway, these behaviors are emitted as a result of the child's failure to establish adequate social relations; that social learning has not been adequate to meet the demands of social situations, and that the child has reacted by "hitting blindly at the problem without finding a satisfactory solution."

Those classified as recessive were described as

> . . . listless, lack vitality, usually under par physically, either below normal intelligence, or ineffective in their use of the ability they have; careless in appearance, care of possessions, work habits; lack interest in people, activity, or events of the outside world (p. 457).

With reference to the behavior of children classified as recessive, Northway stated in substance, that many pre-psychotic and schizoid conditions were evident in this group; in fact, they "should not be called recessive at all, for they never developed a personality from which to recede" (p. 459). An innate, predisposing temperamental factor, together with the lack of family consistency and affection and failure to guide the child during its preschool years, were postulated as etiological factors by Northway in discussing recessive children. The relation of sociometric measures to some of the descriptions of behavior mentioned by Northway are consistent with reports of relevant research, particularly the relation of sociometric measures to athletic ability (Seagoe, 1933), history of physical illness (Sells & Roff, 1964a), low level of intelligence (Jenkins, 1931; Tolor & Tolor, 1955), and physical appearance (Gronlund & Anderson, 1957). In addition, the findings of Bower (1960), that sociometrically defined peer rejection was associated with emotional handicap in children, and of Roff (1956, 1957, 1960, 1961, 1963) that peer rejection based on clinical records was prognostic of young adult maladjustment, are not inconsistent with Northway's contention that many pre-psychotic and schizoid conditions were evident among such children.

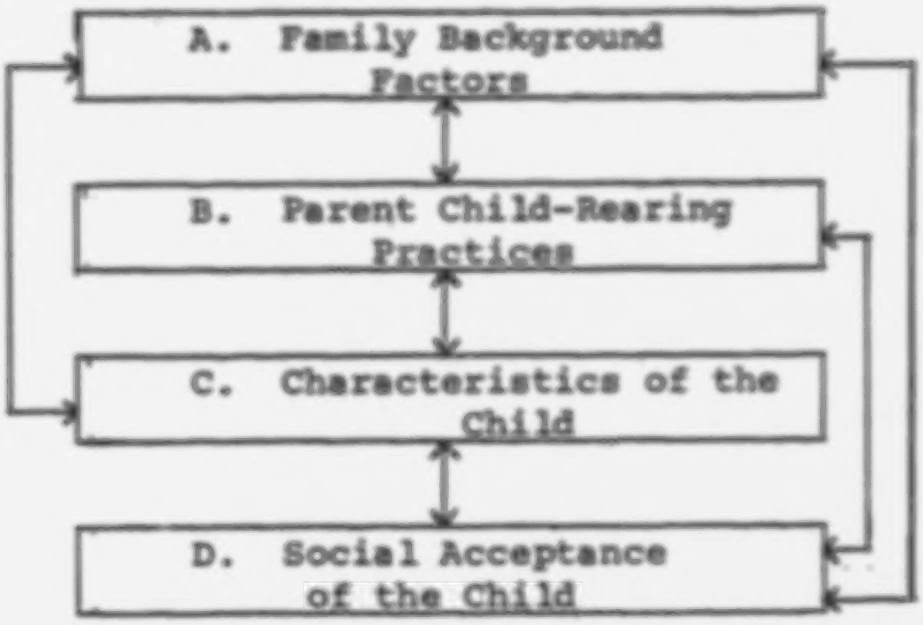
Socially uninterested children, according to Northway (1960), are similar to recessive children in that "they are not liked by the others nor do they appear to make any effort in either formal class activities or social affairs of the school" (p. 488). However, she indicated that socially uninterested children have personal interests, such as music, reading, art, science, and affairs of the home rather than social interests. Children classified as socially uninterested manifest behaviors which may be described as: shy, uncomfortable with other children, quiet, and impersonally interested in observing, but not participating with, other children.

The similarity of socially uninterested and recessive children is apparent in Northway's discussion as she predicts that if treatment is not provided for socially uninterested children, they will become recessive. The etiological factors related to the socially uninterested category were, she said, the same as those for the socially ineffective child, e.g., inadequate social learning. Since Northway indicated that the socially uninterested child may deteriorate to the level of a recessive child unless treatment is provided, and that an innate, predisposing temperamental factor was present in the etiology of recessive children, it might be expected that a temperamental factor may be prevalent in the etiology of socially uninterested children; however, Northway did not comment on this possibility.

CHAPTER III

RATIONALE AND HYPOTHESES

The present study is concerned with relationships among four sets of variables, significant in personality development, which are represented conceptually in the following diagram. The four sets of concepts can be visualized as constituting a matrix which defines the scope of this study.


A. Family Background Factors
B. Parent Child-Rearing Practices
C. Characteristics of the Child
D. Social Acceptance of the Child

CENTRAL HYPOTHESIS

The central hypothesis is the expectation of significant interrelatedness among these four categories of variables. This hypothesis is elaborated in the discussion below and in a series of specific hypotheses expressing expected relations among particular variables at specified levels. The rationale related to each specific hypothesis is discussed at the appropriate place in the exposition.

The theoretical importance of linkages in the network of relations involving family-social, parental, parent-child, child, and child-social variables lies both in the comprehensiveness of the formulation and in the integration of social and psychological factors in the understanding of human personality development. While the network presented is far from accounting for all of the variance involved, it nevertheless represents a comprehensive description of the most significant social factors in child development. Studies reported in the literature, reviewed earlier, have demonstrated many of the specifics, but as yet an integrated analysis of an extensive network, such as is investigated here, has not been attempted. In this comprehensive formulation it is possible to test many relationships implied by the emerging model, but not yet submitted to empirical test.

Family Background

The pivotal factors in the family background which are conceptualized as exerting influence on the matrix of relationships include: (1) factors which equip family members, particularly the parents, with the knowledge, skill, and understanding to cope with life's problems and the role of responsible parenthood; (2) factors which contribute to freedom from deprivation and hardships, and more positively, to free the parent so that consideration and effort may be applied to the welfare of the developing child; and (3) factors, interpersonal or external, which may arouse tension in the family. These three factors influence the opportunity to acquire enlightened parental attitudes and practices, and the opportunity to maintain rapport in the child-rearing situation. Impairment in one area prevents or impedes functioning in another.

The third factor, that of family tension, may operate in the family situation even though the parents have acquired enlightened practices and the family is neither deprived nor undergoing hardship in the material sense. Although tension may be aroused when one's basic needs for food, warmth, or physical well-being are threatened, or by serious illness or death of a loved one, other indications of stress-producing tension may befall the family. Interparental tensions associated with lack of sexual satisfaction, lack of consideration, lack of expressed affection, and the inability to talk things over have been identified as coexistent with maladjustment in children (Baruch & Wilcox, 1944). Evidence of interparental tension can be objectively inferred from such consequent actions as divorce, separation, or reports of marital unhappiness.

Conflicts of interparental values are also probable sources of family tension. One source of such conflict may be parental disagreement with regard to child-rearing practices.

Such disagreements have their origin in the interparental differences relevant to the factor of parental enlightenment, and are expected to relate to differences of parental education and background. In addition, the mother who is more highly educated than her husband may be expected to place demands on him, such as earning more money, which he is not equipped to achieve. The better educated parent is likely to have a somewhat different set of values than the less well educated parent. A large educational discrepancy is conceptualized as a definite source of family tension.

A prime indication of stress-producing tension in the family is that of mental illness of a family member. An inference concerning the father's maladjustment may be made on the basis of his inability to (1) keep a job, or (2) be employable at a level commensurate with that for which he is equipped by reason of his education and training.

Parent Child-Rearing Practices

Several hypothetical models of the realm of parental attitudes toward child-rearing have been described in the literature (Becker, 1964; Roe & Siegelman, 1963; Roff, 1949; Schaefer, 1961). Parental self-reports of their child-rearing practices (Sears, Maccoby & Levin, 1957), parental attitudes toward child-rearing (Schaefer, 1959; 1961), and retrospective reports of college students and adults concerning parental treatment (Roe & Siegelman, 1963; Siegelman, 1965) suggest the relevance of the dimensions of Loving-Rejecting and Casual-Demanding. The factor-analytically derived orthogonal dimensions of Loving-Rejecting and Casual-Demanding reported by Roe and Siegelman (1963) have been replicated on a different sample by Siegelman (1965).

Loving-Rejecting.--The concept of Loving-Rejecting, in addition to having linkages with the postulated family background factors above, has marked influence on the cognitive, social, and ego development of the child. The child who experiences the psychological pain of parental rejection does not develop an adequate self-concept (Medinnus, 1965), becomes socially introverted (Siegelman, 1965), evidences anxiety (Siegelman, 1965), acquires aggressive patterns of behavior (Kagan & Moss, 1962), and evidences signs of maladjustment (Medinnus, 1965) such as delinquency (McCord et al., 1963; Schaefer, 1965) and incipient psychopathology (Heilbron & McKinley, 1962).

Casual-Demanding.--The Casual-Demanding dimension of parental child-rearing is conceptualized as describing extreme degrees of controlling, punishing parental practices at one pole and the absence of these practices at the other. Punishing parental behavior tends to cause the child to become fearful and distrustful of others, and to develop overly aggressive defensive reactions which elicit punishing responses from others, reinforcing the child's fear of others

(Davitz, 1958; Kagan & Moss, 1962; McCord et al., 1963). This circularity of effect manifests itself by such personality characteristics as shyness, and feelings of social inferiority (Becker et al., 1959).

Protectiveness.--Protectiveness is conceptualized as a parental characteristic that has correlates with parents' personality traits and value systems, and which is elicited by certain events involving the child. The child with a history of serious or frequent illnesses, or impaired sensory or intellectual functioning, will tend to elicit a pattern of protective responses from parents. Excesses of parental protectiveness limit the child's opportunities for socialization (Hattwich & Stowell, 1936), and maternal protectiveness of sons is associated with non-masculine sex-role interests in boys (Kagan & Moss, 1962); the influences on the child's personality are such that he is reacted to unfavorably by his peers.

Interparental Agreement.--Interparental consistency or agreement with respect to child-rearing practices has an important influence on the child's personality development. At the cognitive level, inconsistent parental practices confuse the child with respect to parental expectations. At the emotional level, negatively reinforced responses, such as physical punishment for an aggressive act, are not quickly extinguished. In addition, parental inconsistency tends to provide a random schedule of reinforcement which further perpetuates the undesired behaviors of the child's personality. In contrast, interparental consistency provides an environment in which parental expectations are learned more rapidly, and a more regular schedule of reinforcement tends to eliminate the undesired behaviors of the child.

Characteristics of the Child

The concepts related to the central hypothesis are limited to those which represent the child's cognitive development, emotional or ego development, physical development, and socialization, with emphasis upon those related to effective or ineffective socialization.

Intelligence.--Intelligence is conceptualized as an attribute of the child which operates as an asset in solving problems related to either emotional or social behaviors. Associated with high intelligence is relative success in the child's learning experiences and the promotion of a higher self-concept and more effective socialization. Relatively low levels of intelligence in children may elicit patterns of parental rejection and protectiveness.

Ego Development.--Ego development is conceptualized as an affective component of personality which plays a paramount role in the child's adjustment. In this context, it is analogous to self-respect or self-love, and has its roots in parental attitudes. The child's early self-concepts derive from his parents' attitudes; positive parental attitudes toward the child develop a positive self-concept, negative parental attitudes foster the development of a negative self-concept in the child. The child with a low self-concept tends to see himself as having more problems than other children. The negative self-concept of the child is accompanied by defensive reactions of suspicion, distrust, aggression, fear of failure, and social introversion. These behaviors elicit punishing responses in interpersonal activities and tend to produce a circular pattern which perpetuates the low self-concept and ineffective social behavior.

Physical Health.--The child's physical development and health may influence his development in other areas. Events such as high fevers which affect the central nervous system may impair intellectual development; other events may reflect psychosomatic disorders which are associated with ego development, and still others may severely limit the child's opportunity for social contacts and social learning. In addition, as noted above, poor physical health on the part of the child may elicit patterns of parental protectiveness which influence socialization.

Socialization.--Background factors, including parental child-rearing practices and attitudes, exert marked influence on the social and personality development of the child. Punishing and rejecting tend to cause the child to become fearful and to exhibit hostility, aggressiveness, distrust, irresponsibility and other behaviors which deter socialization. As one reviewer concluded, unenlightened child-rearing practices result

> . . . in continued reinforcement of the child's fears and begin when he learns to fear others as a consequence of rejection or punishment. He develops defense reactions that temporarily reduce his fears, but, in the long run, these defensive reactions elicit responses from other persons which reinforce his fears of others (Davitz, 1958).

The loving, affectionate parent exemplifies a favorable model with which the child can identify; the rejecting, punishing parent provides a negative one. The parents who present a favorable model also tend to provide an environment in which the child learns to meet the demands of social situations. The child whose parents use unenlightened practices is hampered in developing socially; he is apt to be inadequately prepared to meet social demands.

Social Acceptance

Social acceptance is conceptualized as a sensitive index of the child's total adjustment. Children who are accepted by their classmates tend to function at a psychologically favorable level in all areas, cognitive, affective, physical, and social. The empirical research provides evidence of the widespread association of social acceptance to background factors related to socioeconomic or social level of the family (Campbell, 1964; Gronlund, 1959; Roff & Sells, 1965; Thompson, 1962; Wall, 1960), family background factors (Sells

& Roff, 1964a), intelligence (Barbe, 1944; Bonney, 1944; Jenkins, 1931; Roff & Sells, 1965; Seagoe, 1933; Tolor & Tolor, 1955), personality test scores (Austin & Thompson, 1948; Mitchell, 1956; Seagoe, 1933; Young & Cooper, 1944), observations of behavior (Bonney & Powell, 1955; Echelberger, 1959; Koch, 1933; Lippitt & Gold, 1959), and emotional handicap (Bower, 1960). Roff's important studies have demonstrated a linkage between peer rejection in childhood and young adult maladjustment (Roff, 1956; 1957; 1960; 1961, 1963).

Hypothetical Linkages

The nature of the bivariate linkages in the network of relationships is indicated in Figure 1; the relationships are assumed to be linear and will be tested by correlational methods.

With reference to Figure 1, all concepts have been stated in a manner so as to reflect a network of positive linkages. High levels represent the psychologically favorable ones, i.e. loving, casual, low protecting, and personality traits of kind, not aggressive, responsible, not fearful, etc.

Figure 1

Hypothetical Linkages

Variable	Nature of the Relationship										
	1	2	3	4	5	6	7	8	9	10	11
I Background Factors											
1. Enlightened Parental Practices											
2. Freedom from Hardship	+										
3. Freedom from Family Tension	+	+									
II Parental Child-Rearing Practices											
4. Loving-Rejecting	+	+	+								
5. Casual-Demanding	+	+	+	+							
6. Low Protection vs. Over Protection	+	+	+	+	+						
7. Interparental Consistency	+	+	+	+	+	+					
III Characteristics of the Child											
8. Intelligence	+	+	+	+	+	+	+				
9. Self-Concept	+	+	+	+	+	+	+	+			
10. Health	+	+	+	+	+	+	+	+	+		
11. Personality Traits	+	+	+	+	+	+	+	+	+	+	
IV Social Acceptance of the Child											
12. Peer Acceptance-Rejection	+	+	+	+	+	+	+	+	+	+	+

CHAPTER IV

FIELD METHODS AND PROCEDURES

INSTRUMENTS

Eleven instruments containing 175 variables were used to obtain measures of the theoretical components of the hypothetical network. Seventy-five per cent of the final sample of 100 families responded to all of the instruments. The battery of interviews, questionnaires, tests, and rating forms were completed on 97 per cent of the sample of mothers and children.

Family Background

Variables conceptualized as family background factors were: (1) those which provide the parents access to enlightened child-rearing practices; (2) those which enhance the situation in which the parent can apply enlightened child-rearing practices; and (3) those which free the family from sources of tension.

Thirty-four variables were selected on the basis of an assumed association with the three aspects of family background which had theoretical relevance to this study. The items (Form 7, Appendix I) were included, together with other items for further research, in the Family Background Schedule (Appendix II). A family member, usually the mother, was the source of information for this schedule. The schedule was

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completed by the investigator, or his assistant, during the interview.

Four parental educational variables were selected as measures of factors which permit access to the most relevant child-rearing practices (Appendix I, Form 7, items 6, 7, 16, 17).

Twelve economic characteristics of the family were selected as measures of the second family background factor, enhancement of the situation in which the parents can apply the most relevant child-rearing practices (Appendix I, Form 7, items 1, 2, 3, 5, 8, 9, 10, 12, 13, 14, 15, 18).

Seventeen items which were logically related to potential sources of family tension were derived from the interview schedule (Appendix I, Form 7, items 11, and 19 to 34).

Parental Attitudes in Child-Rearing

The Roe-Siegelman scale had the advantage of fitting the theoretical framework, but it was considered with some reluctance because: (1) it had been developed on male college students' recollections of parental practices; (2) no research on its use with children had been reported; and (3) it had not been used with parents.

The Roe-Siegelman Parent Child Relations Questionnaire (1963) provides scales which are analogous to the theoretical variables developed in the rationale. It was planned to administer this instrument to each subject (mother, father, child). For the parents, the instrument was modified by rewriting the items so the parents could complete the questionnaire to reflect their practices toward the child. A communication from the senior author (Roe, 1964) indicated that this method seemed feasible and granted permission to reproduce the PCR questionnaire. The nature of the modification of the parents' scales is illustrated by the following comparison:

Original item:

Very True	Tended to be True	Tended to be Untrue	Very Untrue	My Mother 1. objected when I was late for meals.
____	____	____	____	

Modified item:

				In raising my son, I 1. objected when he was late for meals.
____	____	____	____	

The empirical research (Roe & Siegelman, 1963; Schaefer, 1961; Siegelman, 1965) indicated that dimensions of Loving-Rejecting and Casual-Demanding could be measured with the Roe-Siegelman instrument. In addition, the scales provide a measure of parental protectiveness; however, the factorial representation of such a dimension has not emerged consistently.

Estimates of interparental agreement or consistency were to be derived from the child's ratings of both parents.

Characteristics of the Child

Intelligence.--The *California Test of Mental Maturity* (Sullivan, Clark & Tiegs, 1957) was selected as the instrument to assess the child's intellectual functioning. This instrument had been routinely administered to all pupils in the school district bi-annually by a qualified professional staff; the answer sheets had been machine-scored; and the scores of each child for two administrations were available to the investigator.

Ego Development.--Two instruments were selected as measures of ego development. One of these, *How I Feel About Myself* (Piers & Harris, 1964) was a research instrument. The authors had reported that: (1) there was no evidence of a consistent sex-difference; (2) positive but low correlations with intelligence and achievement; and (3) satisfactory indices of internal consistency (Kuder-Richardson Formula 2 results ranged from .78 for tenth grade girls to .99 for third grade boys) and split-half reliability (r = .72). A particularly attractive feature of the Piers-Harris instrument was the availability of sub-scales which provided the opportunity to test the measure of the child's presumed self-attitude regarding his popularity or social acceptance against an objective criterion of social acceptance.

The *SRA Junior Inventory*, (Remmers & Bauernfeind, 1957) a problems check list, was the second instrument selected as a measure of ego development. To perceive one's self as having many big problems is conceptually related to inadequate ego development. An adequately developed ego carries the implication that the child's coping mechanisms function in such a manner that life's problems do not seem overwhelmingly great to him.

The instrument yields scores in five areas (School, Home, Myself, People, Things in general). The child responds to each of 168 statements, indicating whether the item content represents a big, middle-size or little problem, or not a problem at all. The correlations of scores (N = 3000) among the five areas ranged from .39 to .77 with a median value of .52. Reliabilities of the five areas ranged from .81 to .92. The authors presented data which indicated several statistically significant differences with respect to school grade and sex.

Health Problems.--The Child's Medical History, Appendix II, was completed by the mother during a home visit. The 26 items selected from the mother's report were included with 6 items from the school forms (Forms 8 and 11, Appendix I).

The items included on both instruments were adapted from related forms used in Cycle II of the U. S. National Health Survey.

Personality Traits.--Samples of the child's personality traits were to be measured by two modalities: (1) teacher ratings, and (2) an adaptation of Bower's (1960) Class Play.

Twenty-four bipolar trait rating items were adopted from Cattell (1963). Rating instructions (Appendix II) and twenty-four rosters, one for each trait, were furnished to each teacher, listing pupils in alphabetical order. Teachers rated the pupils in their classes on a seven-point scale for each trait. Only teachers who had subjects in their classes were asked to complete the ratings, but they had no knowledge of the ultimate purpose of the ratings or that subjects were in their classes.

One rating item (Overprotectiveness of parents) was eliminated after a conference with, and reports from, individual teachers indicated that the teachers lacked information upon which to rate this trait. The descriptive titles of the remaining 23 items employed are appended (Form 12, Appendix I).

The reports of research (Cattell, 1963; Digman, 1963) indicated that certain traits form clusters or factors which are analogous to Effective versus Ineffective Socialization, a concept relevant to this study. The traits selected were those described by Cattell as measures of Sizothymia versus Affectothymia and Superego Strength, the two factors or clusters assumed to fit the concept of Effective versus Ineffective Socialization.

Pattern A

Sizothymia versus Affectothymia

Negative Pole	Positive Pole
Negativistic, stubborn, disobedient, argumentative	Cooperative, compliant, obedient
Suspicious of others, ungrateful, rejects affection or solicitude	Trustful of others, readily accepts solicitude of others as sincere
Aggressive tends toward fighting, bullying, teasing, cruelty	Non-aggressive, kind, considerate
Untrustworthy, dishonest	Conscientious, trustworthy
Rigid, has difficulty adjusting to changes or new situations	Adaptable, flexible

Pattern B

Superego Strength

Negative Pole	Positive Pole
Irresponsible, frivolous	Responsible
Untidy, careless with respect to appearance	Neat, tidy, orderly
Careless, destructive of property of others	Careful with property of others
Quitting, fickle	Persevering, determined

The remaining fourteen teacher rating scales were included in order to permit examination of related variables across two or more modalities, i.e. Health Problems and teacher ratings of Poor versus Good General Health (Trait 3). Such associations would serve as an indication that the construct being measured had validity across instruments.

Class Play.--A copy of this instrument, adapted from Bower (1960), is appended (Appendix II). The roles or description of parts were selected on a rational basis to fit the traits which composed personality Patterns A and B of the teacher rating scales.

The items which were designed to measure Pattern A were:

3. Someone who gets angry at little things and gets into many fights.
10. A bully who picks on smaller, weaker children.
13. A person with a very bad temper.
20. A detective who is suspicious of everyone.
21. Someone who is almost as stubborn as a mule.
22. A suspicious character who is not trusted by the others.

Those selected to measure Pattern B were:

8. Someone who is fickle and often changes friends.
14. A neighbor who is careless with other people's property.
15. A neighbor who is careful with other people's property.
16. The laziest person in the world.
17. A character who is a sloppy dresser--very careless about how he or she looks.

The Class Play instrument, like that of the teacher's rating, was administered to class-groups in which there was a child-subject of the study.

Social Acceptance

Sociometric Rating.--The Castleberry School District has participated in the Peer Relations Program for four consecutive years. The fourth annual sociometric survey was conducted concurrently with this study. The procedures employed in the Peer Relations Program are outlined below.

1. Each pupil was provided a class roster of the same-sexed pupils and a mark-sense card. The pupils were identified by numbers.
2. The child voted, by marking on the card, for four pupils whose names were on the roster as "Like Most" and two pupils as "Like Least."
3. The number of nominations received for Like Most (LM) and for Like Least (LL) were transformed to z-scores (Mean = 5.0, SD = 1.0) by same-sexed class-groups, using small sample techniques. The LL z-score was reflected so a high score indicated peer acceptance and a low score denoted peer rejection.
4. A derived score, Like Most minus Like Least, transformed to a similar z-score distribution was computed for each pupil.

Reliability.--Split-half reliabilities for Like Most (LM) and Like Least (LL) were determined by correlating the pupil's z-scores based on votes received from even numbered classmates with his z-scores based on votes received from odd-numbered classmates. The uncorrected reliability of the LD z-scores was then estimated.

Denoting the pupil's z-score based on LM and LL votes received from odd versus even numbered voters as follows:

1: ZLM odd pupils

2: ZLM even pupils

3: ZLL odd pupils (reflected)

4: ZLL even pupils (reflected)

then, the reliability of ZLD was estimated by:

$$r_{(1 + 3)(2 + 4)} = \frac{r_{12} + r_{14} + r_{23} + r_{34}}{\sqrt{\sigma_1^2 + 2r_{13} + \sigma_3^2}\sqrt{\sigma_2^2 + 2r_{24} + \sigma_4^2}}$$

Corrections for "test length" were then made (McNemar, 1955, p. 157). The results shown in Table 1 demonstrated a high level of internal consistency of the LD measure of Peer Acceptance-Rejection.

Table 1

Peer Relations Program Estimates of Split-Half Reliability
of Like-Difference Sociometric Ratings
Castleberry School District

Sociometric Survey	Boys			Girls		
Year	N	Unc.	Cor.	N	Unc.	Cor.
1962	667	.68	.81	655	.67	.80
1963	514	.62	.77	518	.65	.79
1964	671	.63	.77	637	.66	.80
1965	652	.58	.73	648	.58	.74

The stability of the LD measure of social acceptance was .59 (N = 798). Considering a time interval of one year between sociometric surveys, with different peers voting for the pupil on each occasion, the measure of stability is also quite high.

A series of reports from the Peer Relations Program have presented information concerning the association of social acceptance, as measured by the LD z-score, with sibling status (Sells & Roff, 1964a), intelligence and socioeconomic status (Roff & Sells, 1965), and birth order (Sells & Roff, 1964c). These reports, together with results of unpublished research of the Peer Relations Program, provided convincing evidence that the LD z-score is a remarkably sensitive measure of social acceptance.

SAMPLE

Source

The subjects for this study were drawn from Castleberry School District, one of the school districts participating in the Peer Relations Program of the Institute of Behavioral Research. The Peer Relations Program used a sample of school children in 19 Texas and 2 Minnesota cities and its objectives were: (1) to estimate the incidence of peer rejection in a population sample; (2) to investigate the nature and extent of factors associated with peer rejection; and (3) to study the affect of these factors on personality development (Sells &

Roff, 1964b).

Castleberry School District is located near Fort Worth, Texas, and services the predominantly middle class residential communities of River Oaks and Sansom Park. No Negroes reside in these communities and none are enrolled in the school system.

Approximately 700 pupils of this district participated in the Peer Relations Program for four consecutive years. Like-sex sociometric ratings of Like Most (LM) and Like Least (LL) as well as Teacher Ratings (TR) were obtained on each subject during each of the annual sociometric surveys.

Selection of Children

A weighted score of two times the difference of Like Most minus Like Least (LD) plus the Teacher Rating (2LD + TR) was used to select 50 children for each of two groups, one high and one low on sociometric ratings. Selection was based on their third annual sociometric ratings. The use of the weighted score (2 LD + TR) was justified on the basis of measures of year-to-year stability. Test-retest correlations on this measure yielded coefficients of .70 and above. Subjects in the High Group were defined as having scores one or more standard deviations above the mean on 2LD + TR; the Low Group was defined as having scores one or more standard deviations below the mean. The means and standard deviations were with reference to the class-groups which participated in the sociometric survey.

An examination of the scores (2LD + TR) indicated that 137 children had been included in the High and Low Groups for the 1963-1964 school year. A search of school records indicated that 12 of these had moved from the school district. Table 2 reflects the grade and sex composition of the potential sample.

Among the 125 prospective subjects, there were three sets of sibling pairs. In such instances one subject was to be randomly selected from each pair to assure that no family would be duplicated in the sample.

Table 2

Potential Sample, by Grade,
Sex and Peer Status

Grade	Sex	Peer Status	
		High	Low
Sixth	B	8	11
	G	9	9
Seventh	B	14	8
	G	15	11
Eighth	B	12	12
	G	8	8
Total	B	34	31
	G	32	28
Combined		66	59

The sample of parents was expected to include the father and the mother, provided they resided together. Since one family could not have more than one child in the study, it was anticipated that approximately 100 fathers and 100 mothers would compose the sample of parents. In the event a family declined to participate in this research, another subject was to be selected and that family invited to participate.

Approval was granted by the superintendent and the school board to conduct this research with subjects from Castleberry School District. A faculty member, at the supervisory level, was designated by the superintendent as coordinator of this research.

Selection of the Families

Letters were sent to each family whose child was on the list of prospective subjects, inviting the family to participate in the study. A meeting was held to familiarize the parents with the research; twenty-five families agreed to participate at that time.

Parents were requested to sign a statement indicating their voluntary participation in the study and granting permission for the administration of psychological tests to their child. Precautions were taken to insure the confidentiality of results of tests, interviews or other information pertaining to individuals or families, and the parents were assured that precautions would be observed to safeguard their privacy. The first step in this direction was to assign each family an identification number to be used instead of names on forms, schedules, and questionnaires.

The principals of the three schools involved offered their assistance in contacting and persuading the selected families to participate in this research. Largely through their efforts the number of participant families was increased to 94. Refusals by families numbered 28. The refusing families were personally contacted by the investigator and the number of subject families increased to 97. Three of the families that had agreed to participate later refused to do so. Since the initial list of prospective subjects was exhausted, and the number of subject families numbered only 94, it was necessary to find six additional subjects in order to obtain the desired 100 families. An examination of the sociometric scores of the children whose families had agreed to participate indicated that more accepted than rejected children were included in the sample. Six children were selected from the group of 700 mentioned above; the six selected were the next lowest on the selection criterion (2LD + TR for the third year sociometric survey). Table 3 reflects the composition of the final sample by grade, sex, and high or low peer status group.

Table 3

Final Sample, by Grade, Sex and Peer Status

Grade	Sex	Peer Status	
		High	Low
Sixth	B	6	10
	G	7	9
Seventh	B	12	7
	G	11	8
Eighth	B	9	8
	G	7	6
Combined		52	48

Socioeconomic Background

Except for one family, the participants resided in River Oaks, Sansom Park, or areas immediately adjacent to these communities, located in three census tracts in the For Worth Metropolitan Area (U. S. Census of Population and Housing; 1960). The median family income, and median school grade completed for adults, are reported for these three census tracts in Table 4.

One participating family resided in Fort Worth's Arlington Heights area; the children commuted to Castleberry School where the mother was employed as a teacher. The distribution, by census tract of the remaining 99 families in the study, is indicated in the right margin of Table 4.

Table 4

Socioeconomic Parameters of the Population and Distribution of Sample by Census Tracts

Community	Census Tracts	Number of Heads of Households	Median Income (Family)	Median Grade Completed (Adults)	Number of Study Families
River Oaks	T5	2630	6134	12.0	63
Sansom Park	5B	1913	5083	9.5	25
Fort Worth	7	1279	4823	11.1	11

DATA COLLECTION

Procedures

During the introductory interview, the parents were apprized of the nature of the study and what would be requested of them in terms of the types of information and the approximate time necessary to provide the information. At that time, assurance was given that the children would not miss classroom work by participating in the study. The announced plan, which was followed closely, was to make one home visit and to hold two testing sessions for the parents; the children were to be tested during free time at school by professionally qualified personnel. The nature of the data collected is summarized in Appendix I.

The home visits were arranged by appointment and no serious obstacles were encountered either with respect to appointment keeping or responding to questions during the interview.

Three testing sessions were held for the purpose of completing the questionnaires by the parents. Separate sessions were held in each community in an effort to offer maximum convenience to the parents. The facilities were provided through the cooperation of the superintendent of the school district and the school coordinator. The parents were invited to attend at a time which would be convenient to them. This method of data gathering did not prove to be particularly effective as only 43 mothers and 28 fathers responded to the invitations to attend these sessions.

As an alternate method of collecting the data, appointments were made with the parents to complete the questionnaires in their homes. Since most of the fathers and many of the mothers worked during the day, most home visits for this purpose were made in the evenings or on weekends. After canvassing all of the families in this manner, forty-nine families had not completed all of the forms.

As a last resort, questionnaires were left with the parent to complete at his or her convenience. In such cases, an effort was made to get a commitment with respect to the date that the completed questionnaires could be picked up. Upon failing to obtain such a commitment, an addressed, stamped envelope was furnished to encourage prompt mailing of the questionnaires. When this procedure was followed, the test instructions were read to the examinee, and the respondent was asked to complete a couple of items to make sure the instructions were understood and to introduce the parent to the task.

The children composing the sample were tested through the facilities of the school district. A list of subjects, instruments to be administered, and manuals of instructions were furnished to the school coordinator. The tests were administered by qualified personnel, either the school coordinator (director of special education) or the school counselor, at a time which did not interfere with the child's class attendance. The instruments were scored by the investigator or an assistant. Complete testing of children was accomplished on each of the instruments except for one case on the Roe-Siegelman PCR Questionnaire; this child said he could not remember his father and no adult male resided in the household.

Completeness of Data Collection

Reasons for incomplete data collection from the families can be summarized in three broad categories: (1) the parent was not present in the home because of divorce or separation; (2) the family moved after completing part of the questionnaires; and (3) some fathers refused to complete the questionnaires.

Since the literature review indicated that children with low peer relations would be expected to come from families where divorce or separation were prevalent, the non-availability of parents for this reason was anticipated. The Roe-Siegelman Parent Child Relations Questionnaire was not collected from:

Children: one low peer status boy that could not remember his father.

Mothers not available: one divorcee mother of a low peer status boy, and one divorcee mother of a low peer status girl.

Fathers not available: nine divorced, separated, or not living with the family; two were fathers of subjects with high peer relations, seven were fathers of subjects with low peer relations.

Parents refusing to complete forms: fourteen fathers; five of children with high and nine of children with low peer relations.

The following table reflects the completeness of data for the sample of 100 families.

Table 5

Family Data: Complete and Incomplete Cases
by Sex and Peer Status of the Subject

Sex	Complete		Incomplete	
	High	Low	High	Low
B	25	17	2	8
G	20	13	5	10
Totals	45	30	7	18

CHAPTER V

TECHNICAL METHODS AND INTERMEDIATE RESULTS

A major strategy of the research design required that the 175 basic data variables be reduced, without substantial loss of meaning, to represent the 12 relevant dimensions of the central hypothesis. Differing technical methods were applied, depending on the nature of the basic data, to develop composite or factor scores for 17 measures of the 12 dimensions. In order to avoid contamination, the measures at each level were developed before examining relationships between any two measures.

MEASURES OF FAMILY BACKGROUND

Two measures were developed to represent the three hypothetical factors at this level. The measure designated as Social Level embodies two aspects of family social level mentioned earlier: (1) the opportunity to acquire the most relevant child-rearing attitudes and practices; and (2) factors which contribute to freedom from deprivation and hardship. The third factor is purported to be measured by the composite variable designated as Family Tension.

Measure of Social Level

Social Level, as defined here, is a second-order factor which measures the common variance of three primary factors: (1) Family Economic Level; (2) Father's Educational Level; and (3) Mother's Educational Level.

The steps involved in the evolution of the measure of Social Level, described in detail below, are briefly enumerated as follows:

1. The distributions of the 18 variables selected as potential measures were examined.
2. The variables were scaled, when scaling seemed desirable.
3. The selected variables were intercorrelated.
4. The matrix of correlations was factor analyzed.
5. The primary factors interpreted as best representing the theoretical concepts were intercorrelated and factor analyzed.
6. Scores on the second-order factor which represented the common variance of the relevant primary factors were computed.

Figure 2 contains a schematic diagram of the structure of Social Level.

Figure 2

Schematic Diagram of Second-Order Factor of Social Level

Order	Description		
Second-order factor	Social Level		
Primary factor	Family Economic Level	Father's Educational Level	Mother's Educational Level
Variables	Occupation Income Home Value	Grade Completed HS Graduate	Grade Completed HS Graduate

Table 6 provides descriptive statistics for each of the 18 selected background variables used in this study.

Table 6

Means and Standard Deviations of 18 Measures of Social Level for 100 Families

Variable	Mean	Standard Deviation
1. Father's Occupational Level	3.69	1.59
2. Father's Income Stanine	5.00	1.96
3. Years Employed--Father	9.75	7.34
4. Mother Employed	.40	.49
5. Market Value of the Home ($1,000)	11.06	5.65
6. Grade Completed--Father	11.20	3.16
7. Grade Completed--Mother	11.30	2.64
8. Family Size--Number	3.01	1.55
9. Number of Cars	1.70	.59
10. Age of Newest Car	5.61	2.44
11. Father Regularly Employed	.89	.31
12. Father's Income--Dollars ($1,000)	7.56	3.54
13. Total Family Income ($1,000)	9.20	4.23
14. Children at Home--Number	2.77	1.38
15. Value of Newest Car ($100)	9.22	7.88
16. High School Graduate--Father	.60	.49
17. High School Graduate--Mother	.68	.47
18. Family Income--Per Capita ($100)	21.02	11.43

1. Father's Occupational Level.--This 7-point scale was adopted from Warner's Social Class Index (Warner *et al.*, 1949), and reflected so that a high score would denote high occupational level. The number of fathers whose occupations were included in each category is shown in Table 7.

Table 7

Distribution of Father's Occupation by Category

Occupational Category	Number
7 (Professional)	5
6	6
5	18
4	33
3	12
2	14
1 (Unskilled)	12

2. Father's Income Stanine.--The data reported under 12, below, were ordered on a stanine scale.

Table 8

Stanine Distribution of Father's Income

Stanine Category	Number Included	Range of Annual Income From	To
9	4	$16,000	$20,000
8	7	11,000	15,999
7	12	10,000	10,999
6	17	7,500	9,999
5	20	6,001	7,499
4	17	5,001	6,000
3	12	4,100	5,000
2	7	3,400	4,000
1	4	below	3,400

3. Years Employed--Father.--The length of time the father held his present, or most recent job, was determined from the interview, and recorded to the nearest year.

Table 9

Length of Time Father Held Most Recent Job

Years on the Job	Frequency
Less than 1	7
1-2	13
3-4	10
5-6	13
7-9	9
10-19	37
Over 19	11

4. Mother Employed.--Only those mothers who indicated they were regularly employed at the time of the interview were scored on this dichotomous variable:

Response:	Yes	No
Frequency:	40	60

5. Market Value of the Home.--The figure furnished by the interviewee was used for this variable.

Table 10

Distribution of Reported Value of the Home

Value in $1,000	Frequency
3-5	8
6-10	51
11-15	23
16-20	14
21-25	3
Over 25	1

6. Grade Completed--Fathers.--The school grade or years completed by the father was distributed as indicated in Table 11.

Table 11

Grade Completed--Fathers

Grade	Frequency
2	1
4	1
5	2
6	3
7	4
8	7
9	8
10	13
11	17
12	18
13	5
14	4
15	3
16	10
17	1
18	3

7. Grade Completed--Mothers.--The school grade or years completed by the mother was distributed as indicated in Table 12.

Table 12

Grade Completed--Mothers

Grade	Frequency
4	1
5	3
6	2
7	4
8	4
9	4
10	7
11	25
12	29
13	6
14	6
16	7
18	2

8. Family Size--Number.--This variable consisted of a count of the number of children in the family, including the subject and the children who no longer resided with the family; step-children or half-children who did not reside or had never resided with the family were excluded, as were the parents. The distribution of this variable is indicated in Table 13.

Table 13

Family Size--Number

Size	Frequency
1	9
2	38
3	23
4	18
5	5
6	3
7	0
8	4

9. Number of Cars.--The frequency distribution of the number of cars owned by the families is shown in Table 14.

Table 14

Number of Cars

Number	Frequency
0	1
1	33
2	62
3	3
4	1

10. Age of Newest Car.--The car age was ordered on a scale from newest to oldest, as indicated in Table 15.

Table 15

Method of Scaling Car Age

Scale Score	Year Model	Frequency
1	'65	5
2	'64	10
3	'63	12
4	'62	7
5	'61	9
6	'60	11
7	'58-'59	17
8	'55-'57	19
9	No car, or older than '55	10

11. Father Regularly Employed.--Fathers who had been unemployed other than temporarily, or who had changed jobs more frequently than once a year, were scored as not regularly employed. Two disabled veterans, not otherwise employed, were scored as not regularly employed, although they received disability compensation.

Regularly Employed:	Yes	No
Frequency:	89	11

12. Father's Income--Dollars.--In one case the respondent (divorcee) evidenced doubt but gave her estimate of the father's annual income.

Table 16

Distribution of Father's Annual Income

Annual Income	Number
$20,000	1
18,000	0
17,000	1
16,000	2
15,000	2
14,000	2
13,000	0
12,000	1
11,000	4
10,000	11
9,000	5
8,000	9
7,000	13
6,000	13
5,000	19
4,000	8
3,000	9

13. Total Family Income.--These data represented the combined incomes of both parents. For comparison with Father's Income Stanine, 2 above, these data were ordered on a stanine scale.

Table 17

Stanine Distribution of Family Annual Income

Stanine	Number	Range of Family Income From	To
9	4	$18,600	$25,400
8	7	14,100	18,000
7	12	11,100	14,000
6	17	9,300	11,000
5	20	7,000	9,000
4	17	5,550	6,900
3	12	5,000	5,500
2	7	3,900	4,900
1	4	3,000	3,840

14. Children at Home--Number.--This variable consisted of a count of the number of children, including the subject, residing in the home.

Table 18

Number of Children at Home

Size	Frequency
1	15
2	36
3	22
4	19
5	3
6	6
7	1
8	1

15. Value of Newest Car.--The year, make, model, and body type of each family car was obtained by interview. The retail value of the newest car was then determined by reference

to the June, 1965, Southwestern edition of the Used Car Dealers Guide, without regard to accessories such as air conditioning.

Table 19

Frequency Distribution of Assessed Value of Family Car

Car Value ($100)	Frequency
0	1 (no car)
1-4	37
5-8	15
9-12	18
13-16	15
17-20	5
21-24	3
25-30	4
Over 30	2

16. High School Graduate--Father.--Prior to 1943, there were only 11 grades in the Texas school system. All parents who were reported as completing the eleventh grade or higher before 1943 were also reported as graduating from high school.

Graduated:	Yes	No
Frequency:	61	39

17. High School Graduate--Mother.--

Graduated:	Yes	No
Frequency:	68	32

18. Family Income--per capita.--This variable was derived by dividing Annual Family Income by the number of

family members, including parents, living at home, and expressing the result in hundreds of dollars.

Table 20

Per Capita Family Income

Class Interval ($100)	Frequency
4-6	5
7-9	5
10-12	12
13-15	17
16-18	11
19-20	6
21-23	6
24-26	12
27-29	5
30-32	8
33-35	4
36-38	1
39-41	1
42-44	3
45-47	1
48-50	0
51-53	1
54-56	0
57-59	0
60-62	2

The 18 measures were intercorrelated and the matrix of correlation coefficients (Table 1, Appendix III) was factor analyzed using the Powered Vector Method (Overall & Porterfield, 1963). The unrotated factor matrix was examined and it was decided to eliminate those factors which had a salient loading on only a single variable and those which accounted for less than 5 per cent of the variance, an arbitrary but customary cutting-point (Harman, 1960). The six factors which satisfied this criterion were rotated by the Varimax Method; the descriptive interpretation and per cent of variance explained by each factor, the loading of each of the 18 variables on the six factors, and the communalities of the variables are reported in Table 21.

The 18 variables were transformed to z-score distributions (Mean = 50; SD = 10) and a composite factor score was computed for each family, using, in effect, unit weights on each variable composing the respective factor scores. The included variables on each factor are indicated below:

I. Economic Level:

Father's Occupational Level
Father's Income Stanine
Market Value of the Home
Father's Income--Dollars
Total Family Income
Family Income--Per Capita

II. Family Size:

Family Size--Number
Children at Home--Number

III. Material Goods--Car:

Number of Cars
Age of Newest Car
Value of Newest Car

IV. Employment Stability:

Years Employed--Father
Father Regularly Employed

V. Father's Educational Level:

Grade Completed--Father
High School Graduate--Father

Table 21

Factor Loadings of 18 SES Variables on Six Factors Derived by Powered Vector Factor Analysis with Varimax Rotation (N = 100)

Variable	I	II	III	IV	V	VI	
	Econ.- Level	Fam. Size	Material Goods (Car)	Empl. Sta- bility	Father's Educ. Level	Mother's Educ. Level	Commu- nality
1. Father's Occupational Level	76	-	-	-	31	-	.72
2. Father's Income Stanine	88	-	-	-	-	-	.91
3. Years Employed--Father	-	-	-	84	-	-	.73
4. Mother Employed	-	-	-	-	-	-	.20
5. Market Value of Home	57	-	42	-	-	-	.57
6. Grade Completed--Father	47	-	-	-	72	-	.86
7. Grade Completed--Mother	-	-	-	-	-	78	.88
8. Family Size--Number	-	92	-	-	-	-	.93
9. Number of Cars	-	-	68	-	-	-	.48
10. Age of Newest Car	-	-	-86	-	-	-	.80
11. Father Regularly Employed	-	-	-	73	-	-	.60
12. Father's Income--Dollars	92	-	-	-	-	-	.93
13. Total Family Income	86	-	-	-	-	-	.84
14. Children at Home--Number	-	94	-	-	-	-	.94
15. Value of Newest Car	-	-	86	-	-	-	.81
16. HS Graduate--Father	-	-	-	-	86	-	.87
17. HS Graduate--Mother	-	-	-	-	-	83	.87
18. Family Income--Per Capita	72	-44	-	-	-	-	.79
Per Cent of Total Variance:	24.8	12.6	13.0	8.4	8.6	8.8	76.3

Decimals omitted; loadings <.3 not shown.

VI. Mother's Educational Level:

Grade Completed--Mother
High School Graduate--Mother

The scores on the six factors, I through VI, were intercorrelated, and the second-order factor loading on each primary factor was computed by the Summation Method (Harman, 1960); the results are reported in Table 22.

Table 22

Intercorrelations of Scores on Six Factors for 100 Families and Second-Order Factor Loadings

Factor	I	II	III	IV	V	VI	Second-Order Factor Loadings
I Economic Level		-40	42	40	61	57	.93
II Family Size			-23	-19	-26	-45	-.51
III Material Goods--Cars				20	26	28	.46
IV Employment Stability					14	07	.30
V Father's Educational Level						56	.63
VI Mother's Educational Level							.67

Decimals omitted.

An examination of the loadings on the second-order factor, Table 22, of the six primary factors, suggested that the common variance of Factors I--Economic Level, V--Father's Educational Level, and VI--Mother's Educational Level, would measure the theoretical background factors related to (1) factors which equip family members with the knowledge, skill, and understanding to cope with life's problems and the role of responsible parenthood, and (2) factors which contribute to freedom from deprivation and hardship and free the parents to apply their knowledge and skill in the interest of the developing child.

The loadings of the second-order factor of Social Level were, as indicated in Table 23, rather uniformly distributed among the three primary factors. This pattern, as conceptualized in the rationale, emphasizes the role of enlightened parenthood. The three factors predict 81 per cent of the variance of the second-order factor (R = .90), as indicated in Table 24. Individual scores on the second-order factor of Social Level were computed, using the beta weights

Table 23

Intercorrelations of Scores on Three Factors and the Calculation of Second-Order Factor Coefficients on Family Social Level

Variables		3	2	1	
I Economic Level	3				
V Father's Educational Level	2	.6145			
VI Mother's Educational Level	1	.5698	.5633		Σr_{jk} = 1.7476
Σr_{ij}		1.1843	1.1778	1.1331	
Σr_{ij}^2		.7023	.6949	.6420	
s_e^2		.6215	.6075	.5223	
Social Level (loadings)		.7883	.7794	.7227	

calculated for the regression equation (Table 24).

Measures of Family Tension

This measure of the third family background factor, that of family tension, was logically constructed from 17 items which were judged to be symptomatic of sources of

Table 24

Calculation of the Multiple Correlation, Beta Weights and Regression Equation on Social Level

		3	2	1	0	Totals
I Economic Level	3	1.0000	.6145	.5698	.7883	2.9726
V Father's Educational Level	2	.6145	1.0000	.5633	.7794	2.9572
VI Mother's Educational Level	1	.5698		1.0000	.7227	2.8558
S Social Level	0	.7883			1.0000	3.2904
	2.3		.6223	.2132	.2950	1.1305
	1.3		.3426	.6753	.2735	1.1620
	0.3		.4740		.3786	.9472
	1.23			.6023	.1724	.7747
	0.23			.2862	.2388	.4113
	0.123				.1895	.1895

$\beta_{01.23} = .2862$
$\beta_{02.13} = .3759$
$\beta_{03.12} = .3942$

Check:
$\Sigma \beta_i C_{0i} = .8106$
$RO^2_{(123)} = .8105$
$RO_{(123)} = .9003$

$$S = .39Z_3 + .28Z_2 + .29Z_1 - 3.0$$

tension producing stress. Each item was scored dichotomously, in the direction that would indicate the presence of a tension symptom. A high score represented the presence of a large number of tension symptoms. The sum of the item-scores yielded a score on the measure designated Family Tension, the operational definition of the third family background factor. Reference to Table 25, indicates that the Family Tension scores were moderately skewed. Item means, standard deviations, and correlations with the composite score are reported in Table 26; an estimate, using Kuder-Richardson Formula 20 (1937), indicated only a moderate level of internal consistency (r = .64) of the scale.

Table 25

Distribution of Family Tension Scores

Score	0	1	2	3	4	5	6	7	8	9
Frequency	13	16	22	20	7	3	9	5	4	1

In the interest of understanding the structure of this scale, the item intercorrelations were factor analyzed, using the Powered Vector Method without rotation. This technique yields an approximation of a principal axis solution with orthogonal rotation (Overall & Porterfield, 1963).

The results of this analysis (Table 27) warranted the retention of all items with the possible exception of items 1 and 12. While item 1, Mother baby sits, etc., correlated

Table 26

Analysis of Items of the Measure of Family Tension (N = 100)

Item	Description	Mean	SD	Correl. with Total Score
1.	Mother baby sits, takes in washing or ironing	.05	.22	.11
2.	Mother contributes 50% or more of total family income	.10	.30	.48
3.	Mother completed a higher grade than father	.38	.49	.40
4.	Mother has eighth grade education or less	.14	.35	.37
5.	Father not regularly employed	.12	.32	.56
6.	History of serious illness in the family excluding child-subject	.28	.45	.49
7.	Death of immediate family member	.12	.32	.41
8.	Previous marriage by either parent	.13	.34	.40
9.	Parents separated or divorced	.10	.30	.36
10.	The child-subject was adopted	.07	.26	.37
11.	Mother says the marriage is not a happy one	.12	.32	.36
12.	More than three children in the family	.33	.47	.29
13.	Half, step, or adopted siblings in the family	.12	.32	.43
14.	Either parent married more than twice	.03	.17	.29
15.	No adult male living in the home	.05	.22	.34
16.	Psychiatric history of any member	.11	.31	.44
17.	Discrepancy (+ 1σ) between father's educational level minus his occupational level	.11	.31	.49
18.	Total Score (sum of items 1-17)	2.36	2.17	

Table 27

Factor Loadings of 17 Family Tension Scale Items on Seven Factors Derived by Powered Vector Factor Analysis Without Rotation (N = 100)

Item	Factor							Communality
	I	II	III	IV	V	VI	VII	
1. Mother baby sits, takes in washing or ironing	-	-	-	81	-	-	-	74
2. Mother contributes 50% or more of total family income	44	38	-35	-	47	-	-	74
3. Mother completed a higher grade than father	-	-	-	-	67	-	-	64
4. Mother has eighth grade education or less	-	-	-	76	-	-	-	73
5. Father not regularly employed	-	65	-	-	-	-	53	75
6. History of serious illness in the family excluding child-subject	-	75	-	-	-	-	-	66
7. Death of immediate family member	-	-	-	-	54	-	-	49
8. Previous marriage by either parent	-	-	81	-	-	-	-	76
9. Parents separated or divorced	89	-	-	-	-	-	-	81
10. The child-subject was adopted	-	-	-	-	-	-85	-	92
11. Mother says the marriage is not a happy one	82	-	-	-	-	-	-	74
12. More than three children in the family	-	-	-	34	-	33	-	32
13. Half, step, or adopted siblings in the family	-	-	74	-	31	-	-	78
14. Either parent married more than twice	65	-	31	-	-	-	-	62
15. No adult male living in the home	49	-	-38	-	-	-	-	48
16. Psychiatric history of any member	-	67	-	-	-	-	-	61

Table 27--(Continued)

Item	Factor							Communality
	I	II	III	IV	V	VI	VII	
17. Discrepancy (- 1) between father's educational level minus his occupational level	-	59	-	34	-	-	-48	74
Per Cent of Total Variance	15.2	13.2	10.5	9.8	7.3	6.8	5.2	68.0

Decimals omitted; loadings < .3 not reported.

only .11 with ~~the total~~ score, its common variance (.74) with the seven factors in the matrix indicated it was contributing to the measurement of Family Tension. On the other hand, item 12, More than three children in the family, had a fair correlation (.29) with the total score but only 32 per cent of its variance was in common with the seven factors in the matrix. Since neither item 1 nor item 12 appeared to detract from the scale, both items were retained.

MEASURES OF PARENTAL CHILD-REARING ATTITUDES AND PRACTICES

In the absence of reports of use of the Roe-Siegelman PCR Questionnaire with parents or children, an examination of intergroup difference among the ten PCR scales was a necessary prelude to the development of measures. The strategy requiring a reduced number of variables necessitated the comparison of factor structures across the eight groups. Primary factor scores were determined on the dimensions of Loving-Rejecting, Casual-Demanding, and Protectiveness (Roe's Overt concern for the child) for each of the eight groups shown in Tables 28 and 29. Second-order factor scores, based on the common variance among the groups, were developed for the two major variables, Consensual Loving-Rejecting and Consensual Casual-Demanding. A measure of parental agreement on each of the two dimensions, Loving-Rejecting and Casual-Demanding, from the frame of reference of the child was also developed.

Intergroup Comparisons of the PCR Questionnaire

Comparison Mean Scores.--The means and standard deviations, in raw score form, for the parents' self-reports and for the children's perception of their parents on the ten scales of the Roe-Siegelman PCR Questionnaire are shown in Tables 28, 29, and 30. Evaluation of the critical ratio of differences between means leads to the following conclusions:

1. None of the differences of means for boys' perception of fathers versus boy's perception of mothers was significant (Table 28).
2. None of the differences of means for girls' perception of fathers versus girl's perception of mothers was significant (Table 28).
3. From the frame of reference of the child, fathers and mothers of girls were higher on Protecting than fathers and mothers, respectively, of boys (Table 28).
4. From the frame of reference of the child, fathers of boys were higher on Rejecting than were fathers of girls (Table 28).
5. According to their own self-reports, fathers of girls were higher on Protecting, Loving, and Rewarding (Direct-Object) than were the fathers of boys (Table 29).

6. No differences of means were significant between mothers of boys and mothers of girls, according to the mothers' self-reports (Table 30).
7. The interparental comparison based on parents' self-reports indicated that the mean score on Loving was lower for fathers of boys than for mothers of boys; otherwise there were no significant interparental differences for boys or for girls (Table 30).
8. Comparison of the means of parents' self-reports with the child's perception of that parent indicates that the parents' scores tend to deviate in the direction of socially approved behavior: the differences were significant for fathers and for mothers on the scales of Protecting, Rejecting, Rewarding (Symbolic-Love), Loving, and Neglecting; and for the mother only on Punishing (Symbolic-Love) and Demanding (Table 30).

Factor Analyses of the PCR Scales

The raw scores for each parent-child sex group were intercorrelated, yielding the eight correlational matrices listed in Appendix III, Tables 3 to 10, inclusive. Each of the eight matrices were reduced by the Powered Vector Method of factor analysis without rotation; the results are presented in Appendix III, Tables 11-18, inclusive.

As a first step in determining the suitability of the Roe-Siegelman PCR, which had been developed on male college

Table 28

The Roe-Siegelman PCR Questionnaire Childrens' Perception of Parents Raw Scores

Scale	Boys' Perception of Fathers (N = 51)		Girls' Perception of Fathers (N = 48)		CR
	Mean	SD	Mean	SD	
Protecting	43.5	8.2	47.8	7.4	3.16**
Punishing (S-L)	27.9	6.9	25.5	6.8	1.72
Rejecting	32.8	9.9	27.7	9.2	2.66**
Casual	40.3	7.5	42.1	8.3	1.32
Rewarding (S-L)	33.9	5.5	34.1	7.7	.18
Demanding	47.5	9.4	44.9	10.0	1.33
Punishing (D-O)	26.0	8.0	23.4	8.9	1.52
Loving	56.5	9.7	59.4	9.9	1.47
Neglecting	27.9	9.5	26.2	9.0	.91
Rewarding (D-O)	29.2	8.4	28.9	9.1	.16
	Boys' Perception of Mothers (N = 51)		Girls' Perception of Mothers (N = 48)		
	Mean	SD	Mean	SD	
Protecting	43.3	7.8	46.9	7.8	2.29*
Punishing (S-L)	29.0	6.9	27.7	6.8	.94
Rejecting	31.4	9.2	28.6	10.5	1.41
Casual	39.7	7.6	40.0	7.9	.19
Rewarding (S-L)	34.5	6.3	33.9	7.8	.42
Demanding	46.1	9.1	44.0	10.3	1.07
Punishing (D-O)	27.0	7.8	24.9	9.3	1.21
Loving	57.2	9.3	60.2	10.5	1.50
Neglecting	26.0	8.1	25.3	9.0	.41
Rewarding	30.2	8.2	29.0	9.3	.68

*p < .05, two-tailed test.

**p < .01, two-tailed test.

Table 29

The Roe-Siegelman PCR Questionnaire Modified
for Parents' Self-Reports Raw Scores

Scale	Fathers of Boys (N = 43)		Fathers of Girls (N = 34)		CR
	Mean	SD	Mean	SD	
Protecting	39.3	7.2	45.3	8.7	3.17**
Punishing (S-L)	28.0	6.5	26.2	6.4	1.20
Rejecting	26.3	7.9	24.1	4.9	1.35
Casual	39.0	8.5	41.1	6.8	1.18
Rewarding (S-L)	37.5	5.9	36.3	7.0	.84
Demanding	45.8	7.6	42.7	8.8	1.60
Punishing (D-O)	26.1	7.5	24.9	7.8	.67
Loving	62.2	7.8	66.2	7.0	2.33**
Neglecting	22.9	7.2	21.5	5.4	.96
Rewarding (D-O)	26.7	7.2	30.3	7.7	2.07*
	Mothers of Boys (N = 51)		Mothers of Girls (N = 48)		
	Mean	SD	Mean	SD	
Protecting	41.0	9.1	43.6	8.1	1.50
Punishing (S-L)	26.4	5.9	25.3	6.6	.87
Rejecting	25.4	8.0	25.2	8.9	.17
Casual	39.1	6.7	39.8	7.6	.48
Rewarding (S-L)	37.7	7.3	37.6	6.5	.07
Demanding	43.1	8.8	40.8	10.3	1.19
Punishing (D-O)	25.6	7.9	23.2	7.9	1.50
Loving	66.1	7.0	66.8	8.1	.45
Neglecting	21.5	5.6	21.6	7.3	.08
Rewarding (D-O)	27.3	8.3	28.8	8.2	.90

*p < .05, two-tailed test.
**p < .01, two-tailed test.

Table 30

Comparison of Means on Ten Scales of the Roe-Siegelman PCR Questionnaire Between Children's Perception of Parents and Parents' Self-Reports

Scale	Children's Perception of Fathers (N = 99)		Fathers' Self-Reports (N = 77)		CR
	Mean	SD	Mean	SD	
Protecting	45.6	8.1	42.0	8.3	2.90**
Punishing (S-L)	26.7	7.0	27.2	6.5	.48
Rejecting	30.3	10.0	25.4	6.8	3.86**
Casual	41.2	8.0	39.9	7.8	1.08
Rewarding (S-L)	34.0	6.7	37.0	6.5	3.00**
Demanding	46.2	9.9	44.5	8.4	1.23
Punishing (D-O)	24.7	8.6	25.6	7.6	.73
Loving	57.9	9.9	64.0	7.7	4.62**
Neglecting	27.1	9.4	22.3	6.5	4.00**
Rewarding (D-O)	29.1	8.8	28.3	7.6	.65
	Children's Perception of Mothers (N = 100)		Mothers' Self-Reports (N = 99)		
	Mean	SD	Mean	SD	
Protecting	45.1	8.0	42.3	8.7	2.37**
Punishing (S-L)	28.2	7.0	25.8	6.2	2.55**
Rejecting	30.2	10.0	25.3	8.4	3.74**
Casual	39.8	7.8	39.4	7.1	.38
Rewarding (S-L)	34.1	7.2	37.7	6.9	3.60**
Demanding	45.1	9.8	42.0	9.6	2.26*
Punishing (D-O)	26.0	8.6	24.5	8.0	1.27
Loving	58.4	10.3	66.4	7.5	6.25**
Neglecting	25.7	8.6	21.6	6.4	3.83**
Rewarding (D-O]	29.5	8.9	28.0	8.2	1.24

*p < .05, two-tailed test.

**p - .01, two-tailed test.

students' recollections of parental practices, for use with children and parents the respective patterns of unrotated factors were examined. The authors' criteria for the logical interpretation of the factors are briefly summarized:

Loving-Rejecting: the heaviest positive loadings are on Loving and Symbolic-Love Reward; the highest negative loadings are on Neglecting and Rejecting.

Casual-Demanding: a high positive loading is on the Casual scale and high negative loading on the Demanding and the two Punishment scales.

Overt concern for the child: the highest positive loadings are on Protecting or Direct-Object Reward; Symbolic-Love Reward has a positive loading; Rejecting and Neglecting are generally loaded negatively, but usually very small.

The Roe-Siegelman marker variables provided guidelines for a rather straightforward interpretation of Loving-Rejecting: the criteria were satisfied for the B/F, F/B, F/G, B/M, M/B and M/G groups; except for the loadings of Symbolic-Love Reward, the patterns also prevailed for the G/F and G/M factor matrices.

For the Casual-Demanding dimension, the Roe-Siegelman marker variable criterion of high negative loadings on Demanding and the two Punishment scales was satisfied for all eight groups; the Casual scale was consistently loaded at the positive pole, except for M/B, but the loadings were not high.

The third factor, Overt concern for the child, had the characteristically high loadings on Protecting and Direct-Object Reward, except for the M/B factor matrix. The Loving, Rejecting, Neglecting, Demanding, and two Punishment scales tend to have low loadings on this factor; Symbolic-Love Reward had more frequent high loadings on this factor than on the Loving-Rejecting factor.

The residual factors were discarded and the above three factors were rotated to orthogonal simple structure by Varimax procedures for each of the eight sample-groups. The rotated factor loadings on three factors for each of the eight groups may be compared with the Roe-Siegelman sample of Harvard male students. Appendix III, Table 19.

Pattern Similarity Analyses.--The pattern similarity of the rotated factor structures was further examined by comparing rank orders of the loadings of each factor on each scale from the highest positive loading, through the origin, to the highest negative loading. The rank order correlation between samples on the same factor provided an index of the similarity of the factor structure between the two samples. A similar index was computed for each of the eight groups (F/B, F/G, M/B, M/G, B/M, B/F, G/M, and G/F) and the Harvard males' recollections of fathers (H/F) and of mothers (H/M), based on Roe's and Siegelman's data (1963).

Examination of these data, presented in Table 13, strongly supports a dimension of Loving-Rejecting which is stable across groups of differing ages and sex, and across frames of reference of the parents' self-reports and the children's reports of the parents' child-rearing practices.

With reference to the structure of the Casual-Demanding dimension, the general lack of similarity of the Harvard sample with the children's reports of parental child-rearing practices on this dimension suggests age, and, probably, social differences. The lack of marked similarity of the parent samples with the children's reports on this dimension suggests phenomenological differences with respect to roles or frames of reference from which the practices were reported. The similarity of the structures among the groups of children reporting on parental practices suggests that, from the child's frame of reference, the dimension of Casual-Demanding is quite stable regardless of the child's sex or the parental role involved. In addition, these data suggest interparental agreement on the structure of Casual-Demanding when the sex of the child is considered; the loading patterns of fathers and mothers of girls are similar (rho = .75), as are the loading patterns of fathers and mothers of boys (rho = .64). The father-child similarity patterns suggest a higher level of agreement between girls' reports and their fathers' reports than between boys' reports and their fathers' reports. The mother-child similarity patterns were signifi-

Table 31

Rank-Order Correlations of Factor Loadings on Ten PCR Scales Across Ten Samples for Each of Three Factors

Rank-Order Coefficients

Rotated Factor Loving-Rejecting

	F/G	B/F	G/F	H/F	M/B	M/G	B/M	G/M	H/M
F/B	86**	87**	92**	95**	66*	94**	92**	93**	100**
F/G		90**	68*	78**	73*	71*	87**	71*	76**
B/F			89**	93**	79**	83**	95**	83**	87**
G/F				98**	77**	88**	92**	84**	92**
H/F					84**	93**	96**	89**	94**
M/B						70*	72*	61*	66*
M/G							90**	98**	94**
B/M								88**	92**
G/B									93**

Rotated Factor Casual-Demanding

	F/G	B/F	G/F	H/F	M/B	M/G	B/M	G/M	H/M
F/B	60*	26	14	39	64*	08	26	09	52
F/G		76**	73*	44	49*	75**	68*	72*	25
B/F			94**	31	58*	92**	90**	92**	04
G/F				27	59*	90**	90**	96*	-07
H/F					59*	22	54	42	90**
M/B						43	91*	76**	42
M/G							81**	90**	-09
B/M								94**	27
G/M									10

Rotated Factor Overt Concern for the Child

	F/G	B/F	G/F	H/F	M/B	M/G	B/M	G/M	H/M
F/B	69*	76**	22	12	20	53	68*	28	15
F/G		43	18	18	59*	65*	47	36	30
B/F			60*	51	-10	73*	90**	56	36
G/F				67**	-42	70*	76**	93**	76**
H/F					26	69*	57*	73*	54
M/B						20	-18	-13	-18
M/G							83**	85**	48
B/M								75*	36
G/M									71*

Decimals omitted; *p < .05; **p < .01.

cantly associated regardless of the sex of the child.

Several role differences are suggested by the patterns of similarity on the third factor, Overt concern for the child. There was marked similarity of patterns of B/F with B/M and G/F with G/M on this dimension, and there was marked similarity between the child's patterns and those of the same-sexed parent, i.e. B/F with F/B and G/M with M/G. There was an absence of association between the patterns of factor loadings for the child with the opposite-sex parent, i.e. F/G and G/F and M/B with B/M.

Transformation of Raw Scores to Z-Scores.--While response bias would not be affected, the influences represented by the differences of means described above were, with one exception, eliminated by the transformation from raw to z-scores (Mean = 50; SD = 10) within groups, as follows, for each of the 10 PCR scales:

1. Boys' and girls' perception of father as parent.
2. Boys' and girls' perception of mother as parent.
3. Self-reports of fathers of boys.
4. Self-reports of fathers of girls.
5. Self-reports of mothers of boys.
6. Self-reports of mothers of girls.

The transformation provided for the reflection of scales so that high scores represented conceptually favorable directions. This procedure permitted the direct summation across Roe-Siegelman marker variables to provide estimates of factor scores, with equal weights on each variable. While the use of factor loadings may have provided higher construct validity in this sample, such a procedure would probably have rendered confirmation of the results of this study difficult.

Primary Factor Scores.--A primary factor score was computed for each person (father, mother, child) in the study who had completed the appropriate PCR Questionnaire. Properly reflected z-scores were summed across variables of the three primary factor scores as follows:

I. Loving-Rejecting

    Loving
    Rejecting
    Neglecting

II. Casual-Demanding

    Casual
    Demanding
    Punishing, Symbolic-Love
    Punishing, Direct-Object

III. Overt concern for the child

    Protecting
    Rewarding, Symbolic-Love
    Rewarding, Direct-Object

Each of the primary factor scores were transformed to z-scores with a mean of 50 and a standard deviation of 10 for each group of subjects, father, mother, and child, providing 12 factor scores for the members of each family.

Second-Order Factor Scores.--In a manner similar to that used to measure Social Level, described earlier, a single measure was constructed for each family on the dimensions of Loving-Rejecting and Casual-Demanding.

Figure 3

Schematic Diagram of the Construct of Loving-Rejecting

Order	Description			
Second-order Factor	Consensual Loving-Rejecting			
Primary Factor	Loving-Rejecting	Loving-Rejecting	Loving-Rejecting	Loving-Rejecting
Scales	Loving Rejecting Neglecting	Loving Rejecting Neglecting	Loving Rejecting Neglecting	Loving Rejecting Neglecting
Frame of Reference	Child's Perception of Mother	Child's Perception of Father	Mother's Self-Report	Father's Self-Report

The second-order factor coefficients, designed to measure the consensus of the family members, on Loving-Rejecting and Casual-Demanding, were calculated as indicated in Tables 32 and 33, respectively. The multiple correlations of the four scales with the second-order factors and the beta weights for predicting the second-order factor scores were computed; the regression equations were written, as shown in Tables 34 and 35, and weighted to provide a distribution of scores with an arbitrary mean of 50 and a standard deviation of 10.

Figure 4

Schematic Diagram of the Construct of Casual-Demanding

Order	Description			
Second-order Factor	Consensual Casual-Demanding			
Primary Factor	Casual-Demanding	Casual-Demanding	Casual-Demanding	Casual-Demanding
Scales	Casual Demanding Punish (DO) Punish (SL)	Casual Demanding Punish (DO) Punish (SL)	Casual-Demanding Punish (DO) Punish (SL)	Casual-Demanding Punish (DO) Punish (SL)
Frame of Reference	Child's Perception of Mother	Child's Perception of Father	Mother's Self-Report	Father's Self-Report

Table 32

Intercorrelations of Scores on Loving-Rejecting Across Members of the Family (N = 75)

Variables		4	3	2	1	
Child/Father	4					
Child/Mother	3	.7438				
Father/Child	2	.3104	.2090			
Mother/Child	1	.2850	.1843	.3214		Σr_{jk} = 2.0539
Σr_{ij}		1.3392	1.1371	.8408	.7907	
Σr_{ij}^2		.7308	.6309	.2483	.2185	
L_{eo}^2		.7434	.3611	.1911	.1610	
L Consensual L-R (loadings)		.8622	.6009	.4372	.4012	

Table 33

Intercorrelation of Scores on Casual-Demanding Across Members of the Family (N = 75)

Variables		4	3	2	1	
Child/Father	4					
Child/Mother	3	.7093				
Father/Child	2	.3983	.3043			$\Sigma r_{jk} =$
Mother/Child	1	.2655	.2774	.4351		2.3799
Σr_{ij}		1.3731	1.2910	1.1277	.9680	
Σr_{ij}^2		.7322	.6727	.4320	.3282	
c_{eo}^2		.2156	.3353	.4564	.5727	
C Consensual C-D (loadings)		.4643	.5791	.6756	.7568	

Table 34

Calculation of the Multiple Correlation, Beta Weights and Regression Equation Consensual Loving-Rejecting

Variables	4	3	2	1	0	Totals
L-R Child/Father 4	1.0000	.7438	.3104	.2850	.8622	3.2014
L-R Child/Mother 3	.7438	1.0000	.2090	.1843	.6009	2.7380
L-R Father/Child 2	.3104		1.0000	.3214	.4372	2.2780
L-R Mother/Child 1	.2850			1.0000	.4012	2.1919
Consensual L-R 0	.8622				1.0000	3.3015
3.4		.4468	-.0218	-.0277	-.0404	.3568
2.4		-.0488	.9037	.2329	.1696	1.2843
1.4		-.0619		.9188	.1555	1.2795
0.4		-.0904			.2566	.5413
2.34			.9026	.2315	.1676	1.3017
1.34			.2565	.9171	.1530	1.3016
0.34			.1857		.2529	.5736
1.234				.8577	.1100	.9677
0.234				.1253	.2218	.3319
0.1234					.2079	.2079

$\beta_{01.234} = .1283$
$\beta_{02.134} = .1528$
$\beta_{03.124} = -.0750$
$\beta_{04.123} = .8340$

Check:
$\Sigma\beta_i C_{0i} = .7923$
$R^2 = .7923$
$R = .8901$

$$L = .13Z_1 + .15Z_2 - .08Z_3 + .83Z_4 - 2.0$$

Table 35

Calculation of the Multiple Correlation, Beta Weights and Regression Equation Consensual Casual-Demanding

Variables		4	3	2	1	0	Totals
C-D Child/Father	4	1.0000	.7093	.3983	.2655	.7468	3.1299
C-D Child/Mother	3	.7093	1.0000	.3043	.2774	.6756	2.9666
C-D Father/Child	2	.3983		1.0000	.4251	.4791	2.7068
C-D Mother/Child	1	.2655			1.0000	.4643	2.4323
Consensual C-D	0	.7568				1.0000	2.4758
	3.4		.4969	.0218	.0891	.1388	.7466
	2.4		.0439	.8414	.3194	.2777	1.4602
	1.4		.1793		.9295	.2634	1.6013
	0.4		.2793			.4273	1.1071
	2.34			.8404	.3155	.2716	1.4272
	1.34			.3754	.9135	.2385	1.4674
	0.34			.3232		.3885	.8986
	1.234				.7951	.1365	.9316
	0.234				.1716	.3007	.4373
	0.1234					.2773	.2774

$\beta_{01.234} = .1716$
$\beta_{02.134} = .2588$
$\beta_{03.124} = .2372$
$\beta_{04.123} = .4399$

Check:
$\Sigma \beta_i C_{oi} = .7227$
$R^2 = .7227$
$R = .8501$

$$C = .17Z_1 + .26Z_2 + .24Z_3 + .44Z_4 - 5.5$$

Parental Agreement.--The hypotheses regarding parental agreement on the dimensions of Loving-Rejecting and Casual-Demanding could have been tested by sorting the subjects into high and low groups on the relevant variables and intercorrelating the intragroup scores for children's perception of fathers with their perception of mothers on each dimension, Loving-Rejecting and Casual-Demanding. A significant difference between correlations would confirm the hypothesis. A method preferred by the investigator, however, was to determine the difference between factor scores of the child's perception of the father and his perception of the mother; the discrepancy scores, if reflected, provide a measure of parental agreement from the frame of reference of the child. This measure could be correlated with hypothetically related variables.

In order to provide a statistic against which the discrepancy scores could be compared the sample was divided on the selection criteria of High versus Low Peer Status, and the factor scores for C/F and C/M were intercorrelated. The correlation coefficients were transformed to Fisher's z's and tested for a significant difference (McNemar, 1955).

The data in Table 36 were compared with the point biserial correlations between High versus Low Peer Status and the discrepancy scores between the child's perception of father and that of mother on each factor, Loving-Rejecting (r = .31, p < .05) and Casual-Demanding (r = .34, p < .01). Since the two methods yielded essentially the same results, convenience favored using the discrepancy score.

Table 36

Parental Agreement As Perceived by the Child
in Terms of Correlation Coefficients

	Loving-Rejecting	Casual-Demanding
Low Peer Status (N = 47)	.45	.47
High Peer Status (N = 52)	.72	.81
CR of difference	2.04, p < .05	2.97, p < .01

CHARACTERISTICS OF THE CHILD

Intelligence

The *California Test of Mental Maturity* was administered routinely every other year to all students in the school district. The total scale IQ for the past two administrations was averaged for each subject in order to maximize the reliability of this measure. For the sample of 100, the mean averaged IQ was 107.5 and the standard deviation was 14.5, suggesting that this group of children measures above average with respect to national norms.

Ego-Development

Self-Concept.--The self-concept instrument, *How I Feel About Myself* (Piers & Harris, 1964) was administered to each of the 100 child-subjects. The total Self-Concept score was obtained in the manner prescribed by the authors. In addition, each of six factors were scored with unit weights for each item which had a factor loading of .30 or above (Piers & Harris, 1963); the items were keyed so a high score would indicate a favorable score, i.e. a high score on the Anxiety factor represented a conceptually low level of anxiety. Comparison of mean scores for boys and girls, Table 37, indicated no sex-related differences, except on the Anxiety sub-scale. Girls tended to be slightly more anxious than boys, a not unexpected direction.

Table 37

Comparison of Mean Scores on the Piers-Harris Self-Concept Instrument Between Boys and Girls

Scale	Boys N = 52 Mean	Boys N = 52 SD	Girls N = 48 Mean	Girls N = 48 SD	Critical Ratio
Self-Concept Sub-scale					
1. Intelligence	11.4	4.3	10.3	4.2	1.33
2. Behavior	13.8	3.8	14.8	3.0	1.42
3. Anxiety	8.3	2.8	7.0	2.6	2.42*
4. Popularity	8.1	3.4	8.1	3.6	.04
5. Appearance	7.3	3.3	6.5	2.6	1.58
6. Happiness	6.9	2.2	6.5	2.3	.80
Total Self-Concept	50.7	18.3	48.1	16.3	.76

*$p < .05$, two-tailed test.

The construct validity of the Piers-Harris instrument was examined. The sample was divided into High and Low Peer

Status groups on the basis of the selection criterion, and intergroup sub-scale means were compared as shown in Table 38, below. The number of items making up each scale is indicated in parentheses following the title of the scale.

Table 38

Differences Between High and Low Sociometric Status Children on Sub-Scales of the Piers-Harris Self-Concept Instrument

Self-Concept Sub-scale	Sociometric Status High (N = 52) Mean	SD	Sociometric Status Low (N = 48) Mean	SD	Critical Ratio
Intelligence (18)	12.9	3.8	8.7	3.7	5.68**
Behavior (18)	15.5	2.6	13.1	3.8	3.65**
Anxiety (12)	8.6	2.4	6.7	2.8	3.62**
Popularity (12)	10.1	2.3	5.9	3.4	8.14**
Appearance (12)	8.3	2.7	5.5	2.6	5.19**
Happiness (19)	7.8	1.5	5.5	2.3	6.14**
Total Self-Concept	62.0	11.0	46.8	13.2	6.24**

**$p < .01$.

The six sub-scales and total Self-Concept scores were intercorrelated with measures of IQ (most recent CTMM total scale IQ), the Like-Difference sociometric score which was obtained concurrently with the Self-Concept measure, and the Father's Occupational Level. The results are shown in Table 39.

These preliminary results indicated that the Piers-Harris Self-Concept instrument would be a satisfactory measure of Self-Concept as conceptualized in this study.

Table 39

Correlations of Piers-Harris Self-Concept Scores with Measures of Sociometric Status, Intelligence and Father's Occupational Level (N = 100)

Scale	Variable								
Self-Concept Sub-scale	2	3	4	5	6	7	8	9	10
1. Intelligence	57	59	71	75	60	87	42	40	37
2. Behavior		45	53	47	55	76	34	38	31
3. Anxiety			63	56	55	75	41	33	19
4. Popularity				74	68	84	40	62	30
5. Appearance					61	83	25	39	24
6. Happiness						77	39	44	29
7. Total Self-Concept							45	50	38
8. Intelligence Quotient								41	36
9. Peer Acceptance-Rejection									23
10. Father's Occupational Level									

Decimals omitted; all correlation, $p \leq .05$.

The Child's Big Problems (SRA Junior Inventory).--The number of Big Problems reported by each child was selected as another measure of ego development. The scores in each of five problem areas were transformed to a z-score distribution with a mean of 50 and a standard deviation of 10 for boys and girls separately; however, as indicated in Table 40, no sex related differences were evident. The composite sum of the five z-scores was used as the final measure; this procedure insured an equal weighting of the five problem areas with respect to the composite z-score.

Table 40

SRA Junior Inventory Number of Big Problems
Reported by Sample Children by Sex

Problem Area	Number of Big Problems				Critical Ratio
	Boys N = 52		Girls N = 48		
	Mean	SD	Mean	SD	
1. School	6.173	5.7	4.375	4.0	1.84
2. Home	1.923	2.5	1.260	1.6	1.60
3. Myself	3.014	4.7	2.766	3.2	.31
4. People	2.077	4.2	1.359	2.2	1.09
5. General	3.634	3.8	2.391	3.0	1.84

Health Problems

The mean number of health problems, as defined by this scale, was 4.2, with a standard deviation of 2.8. The nature of the content was such that the scale had only a moderate degree of internal consistency. The estimated reliability, based on Kuder-Richardson Formula 20, was .55 (Kuder & Richardson, 1937). Eleven of the 27 items from the Child's Medical History did not reach a significant level of correlation with the total score, but their relationship was in the appropriate direction. These items were retained in the Health Problems Scale on the assumption that they made some, although not a statistically significant, contribution to the total score.

Personality Traits

Teacher Ratings.--The teacher ratings, on each scale, were transformed to z-score distributions (Mean = 50; SD = 10), for boys and girls separately, for each class-group using small sample techniques. This procedure eliminated variance attributable to differences between class-groups, including teachers and sex of the child.

The means for the boys and girls of the sample, Table 41, were compared with the defined mean and standard deviation (Mean = 50; SD = 10) of a peer population of equal size (52 boys; 48 girls). A two-tailed test indicated that none of the means for either boys or girls differed from the expected value. Although the magnitudes of the differences from the expected values of the means were not large, the consistent tendency for them to be in the psychologically unfavorable direction was apparent.

The methodology employed for determining the measure of Social Level was also employed in deriving the measures of Pattern A (Sizothymia versus Affectothymia) and Pattern B (Ego Strength). The teachers' rating of each of the five traits included in Pattern A were intercorrelated and the common factor loading on each trait variable computed, as shown in Table 42. The beta weights for the common factor score and the multiple correlation for predicting the common factor score were determined, Table 43, and the regression equation was written. The multiple correlation coefficient ($R = .91$) indicated that 82 per cent of the variance of the

Table 41

Teacher Ratings of 23 Personality Trait Scales Comparison of Means Between Boys and Girls Z-Scores

Trait Scale (Positive Pole)	Boys N = 52		Girls N = 48	
	Mean	SD	Mean	SD
	Pattern A Sizothymia vs Affectothymia			
1. Non-aggressive, kind considerate	48.5	9.9	50.7	9.3
5. Conscientious, trustworthy	48.9	11.4	49.3	10.2
14. Adaptable, flexible	48.9	10.0	48.7	10.2
21. Cooperative, compliant	47.7	11.0	49.6	9.8
22. Trustful of others	48.4	10.7	49.5	9.4
	Pattern B Superego Strength			
10. Responsible	47.8	10.9	47.2	10.8
11. Perservering, determined	47.7	10.4	48.0	9.7
13. Neat, tidy, orderly	49.2	11.1	48.5	10.1
15. Careful with property of others	47.1	9.9	47.6	10.0
	Other Trait Scales			
2. Popular, well liked	49.6	11.8	49.9	11.1
3. Good general health	52.2	8.5	50.1	10.8
4. Learns fast	48.0	10.7	47.4	9.6
6. Prefers not to be noticed	47.2	10.3	50.5	9.7
7. Placid, free from distress	49.5	10.4	48.9	9.4
8. Calm, relaxed	46.8	9.7	49.2	8.9
9. Cheerful	50.2	9.4	49.4	11.2
12. Practical minded	53.3	11.3	49.4	10.2
16. Aesthetically sensitive	50.3	9.9	47.8	11.5
17. Follows instructions easily	48.9	10.6	47.9	11.8
18. Outgoing, mixes freely	51.3	11.3	48.1	11.3
19. Associates mostly with own sex	49.2	8.2	49.2	10.6
20. Prefers games with many children	40.1	10.8	40.9	9.5
23. Adventurous, bold, willing to chance rejection	53.2	8.6	49.4	10.4

Table 42

Intercorrelations of Scores on Five Teacher Trait Ratings of 100 Children and Computation of Common Factor Loadings on Personality Pattern A (Sizothymia vs Affectothymia)

Trait Rating Scale		Variables					
		5	4	3	2	1	
22. Trustful of others	5						
21. Cooperative, compliant	4	.6155					
14. Adaptable, flexible	3	.4479	.3529				
5. Conscientious, trustworthy	2	.3938	.4893	.3735			Σr_{jk} = 4.2703
1. Non-aggressive, kind	1	.4848	.5344	.2278	.3604		
Σr_{ij}		1.9420	1.9821	1.4021	1.6170	1.5974	
Σr_{ij}^2		.9696	1.0178	.5165	.6639	.6918	
A_{eo}^2		.6017	.6360	.2527	.3676	.3479	
Pattern A (loadings)		.7757	.7975	.5027	.6063	.5898	

Table 43

Calculation of the Multiple Correlation, Beta Weights and Regression Equation Personality Pattern A (Sizothymia vs Affectothymia) Based on Teacher Rating

Trait Scales	Variable	5
22. Trustful of others	5	1.0000
21. Cooperative, competent	4	.6155
14. Adaptable, flexible	3	.4479
5. Conscientious, trustworthy	2	.3938
1. Non-aggressive, kind	1	.4848
Pattern A	0	.7757
	4.5	
	3.5	
	2.5	
	1.5	
	0.5	
	3.45	
	2.45	
	1.45	
	0.45	
	2.345	
	1.345	
	0.345	
	1.2345	
	0.2345	
	0.12345	

$\beta_{01.2345} = .1222$
$\beta_{02.1345} = .1954$
$\beta_{03.1245} = .1077$
$\beta_{04.1235} = .3798$
$\beta_{05.1234} = .3575$

Check:
$\Sigma\beta_i C_{oi} = .8249$
$R^2 = .8248$
$R = .9082$

$$Z_0 = .12Z_1 + .20Z_5 + .11Z_{14} + .38Z_{21} + .36Z_{22} - .85$$

Table 43 (Continued)

4	3	2	1	0	Totals
.6155	.4479	.3938	.4848	.7757	3.7177
1.0000	.3529	.4893	.5244	.7975	3.7796
	1.0000	.3735	.2278	.5027	2.9048
		1.0000	.3604	.6063	3.2233
			1.0000	.5898	3.1872
				1.0000	4.2720
.6212	.0772	.2469	.2260	.3201	1.4914
.1293	.7994	.1971	.0107	.1553	1.2396
.3925		.8449	.1695	.3008	1.7593
.3638			.7650	.2137	1.3849
.5153				.3983	1.3882
	.7898	.1664	-.0174	.1155	1.0542
	.2106	.7468	.0797	.1736	1.1665
	-.0220		.6828	.0972	.8423
	.1462			.2334	.6197
		.7118	.0834	.1493	.9445
		.1172	.6824	.0997	.8655
		.2097		.2165	.4656
			.6726	.0822	.7548
			.1222	.1852	.2675
				.1752	.1753

common factor could be predicted from the five trait variables. This weighted composite of five trait ratings was defined as the measure of personality Pattern A (Sizothymia versus Affectothymia) based on teacher ratings.

Similarly, a measure of personality Pattern B (Superego Strength) was defined on the basis of a weighted composite of four trait variables as shown in Tables 44 and 45, below, which yielded a multiple correlation ($R = .94$) which indicated that 88 per cent of the variance of the common factor could be predicted from the four trait variables.

Table 44

Intercorrelation of Scores of Four Teacher Trait Ratings of 100 Children and Computation of Common Factor Loadings on Personality Pattern B (Superego Strength)

Trait Rating Scale		4	3	2	1	
15. Careful with property	4					
13. Neat, tidy, orderly	3	.6231				
11. Determined, perservering	2	.6700	.5205			Σr_{jk} =
10. Responsible	1	.6287	.6770	.6583		3.7776
Σr_{ij} =		1.9218	1.8206	1.8488	1.9640	
Σr_{ij}^2 =		1.2324	1.1175	1.1532	1.2870	
B_{eo}^2		.6631	.5613	.5871	.7086	
Pattern B (loadings)		.8143	.7592	.7662	.8318	

Table 45

Calculation of the Multiple Correlation, Beta Weights and Regression Equation Personality Pattern B (Superego Strength) Based on Teacher Ratings

Trait Scales		4	3	2	1	0	Totals
15. Careful with property	4	1.0000	.6231	.6700	.6287	.8143	3.7361
13. Neat, tidy, orderly	3	.6231	1.0000	.5205	.6770	.7492	3.5698
11. Determined, perservering	2	.6700		1.0000	.6583	.7662	3.6150
10. Responsible	1	.6387			1.0000	.8418	3.8058
Pattern B	0	.8143				1.0000	4.1715
	3.4		.6117	.1030	.2853	.2418	1.2418
	2.4		.1684	.5511	.2371	.2206	1.1118
	1.4		.4664		.6047	.3298	1.4569
	0.4		.3952			.3369	1.1292
	2.34			.5338	.1891	.1799	.9027
	1.34			.3542	.4716	.2170	.8777
	0.34			.3370		.2413	.6384
	1.234				.4046	.1533	.5580
	0.234				.3789	.1809	.3342
	0.1234					.1226	.1228

$\beta_{01.234} = .3789$

$\beta_{02.134} = .2028$

$\beta_{03.124} = .1843$

$\beta_{04.123} = .3253$

Check:

$\Sigma \beta_i C_{0i} = .8774$

$R^2 = .8774$

$R = .9367$

$$z_0 = .38z_{10} + .20z_{11} + .18z_{13} + .33z_{15} - 4.5$$

Class Play Traits.--In a manner similar to that described for teacher ratings of personality traits, the scores (number of votes received) on the Class Play items were transformed to z-score distributions (Mean = 50, SD = 10) by class-groups, for girls and boys separately, using small sample techniques.

The scores on each item were intercorrelated for 498 boys and 509 girls in the peer population. The intercorrelations of the items were inspected to determine whether they clustered in the manner expected. As indicated in Table 46, several of the trait measures did not cluster in the manner expected. As discussed in Chapter IV, a logical clustering of the items to compose Pattern A included Class Play traits:

3. Someone who often gets angry at little things and gets into many fights.
10. A bully who picks on smaller, weaker children.
13. A person with a very bad temper.
21. Someone who is almost as stubborn as a mule.

The item cluster for Pattern B seemed to be:

12. A hermit who doesn't like to be with people.
14. A neighbor who is careless with other people's property.
16. The laxiest person in the world.
17. A character who is a sloppy dresser--very careless

about how he or she looks.

22. A suspicious character who is not trusted by the others.

The absence of a substantial relationship with item 20, may be attributed to the confounding nature of the item, including the occupational role of a detective with that of suspicion.

Common factor scores were derived in the manner described previously for the two personality patterns based on teacher ratings. The intercorrelations, based on the study sample, are indicated in Table 47, together with the loadings

Table 47

Intercorrelations of Scores on Four Class Play Items of 100 Children and Computations of Common Factor Loadings on Personality Pattern A (Negative)

Class Play Items		4	3	2	1	
3. Angry, gets in many fights	4					
10. Bully	3	.5117				
13. Person with a bad temper	2	.7604	.4169			Σr_{jk} =
21. Stubborn as a mule	1	.3225	.3125	.3218		2.6458
Σr_{ij}		1.5946	1.2411	1.4991	.9568	
Σr_{ij}^2		.9441	.5333	.8556	.3052	
A_{eo}^2		.7604	.5483	.6068	.1806	
Pattern A (Neg.) (loadings)		.8720	.7405	.7790	.4250	

of the common factor on each trait variable of Pattern A (Negative). The multiple correlation (R = .95) indicates that 91 per cent of the variance of the common factor can be accounted for by the four Class Play items (Table 48). This measure was designated Pattern A (Negative) since only negatively oriented personality trait items were used in its derivation.

Table 48

Calculation of the Multiple Correlation, Beta Weights and Regression Equation for Personality Pattern A (Negative) Based on the Class Play

Class Play Items		4	3	2	1	0	Totals
3. Angry, gets in many fights	4	1.0000	.5117	.7604	.3225	.8720	3.4666
10. Bully	3	.5117	1.0000	.4169	.3125	.7405	2.9816
13. Person with bad temper	2	.7604		1.0000	.3218	.7790	3.2781
21. Stubborn as a mule	1	.3225			1.0000	.4250	2.3818
Pattern A (Neg.)	0	.8720				1.0000	3.8165
3.4			.7381	.0278	.1475	.2943	1.2077
2.4			.0377	.4218	.0766	.1159	.6421
1.4			.1999		.8960	.1438	1.2638
0.4			.3987			.2396	.7936
2.34				.4208	.0710	.1048	.5966
1.34				.1687	.8665	.0850	1.0224
0.34				.2490		.1223	.3121
1.234					.8545	.0673	.9218
0.234					.0787	.0962	.1635

$\beta_{01.234}$ = .0[illegible]87
$\beta_{02.134}$ = .2357
$\beta_{03.124}$ = .3736
$\beta_{04.123}$ = .4762

Check:
$\Sigma \beta_i C_{oi} = .9090$
$R^2 = .9091$
$R = .9534$

$$Z_0 = .48Z_3 + .37Z_{10} + .24Z_{13} + .08Z_{21} - 8.5$$

In a like manner, personality Pattern B (Negative) was based on the common variance of the five items selected to measure this pattern. As indicated in Tables 49 and 50, the loadings of the common factor on the five variables which make up this pattern are substantial and account for 84 per cent of the variance of the common factor. This factor was designated personality Pattern B (Negative).

Table 49

Intercorrelation of Scores on Five Class Play Items of 100 Children and Computation of Common Factor Loadings on Personality Pattern B (Negative)

Class Play Items		5	4	3	2	1	
22. Suspicious, not trusted	5						
17. Sloppy dresser	4	.5812					
16. Laziest person in the world	3	.5847	.5953				
14. Careless with others property	2	.3532	.2849	.3590			
12. Hermit	1	.2719	.4422	.3728	.1855		Σr_{jk} = 4.0307
Σr_{ij}		1.7910	1.9036	1.9118	1.1826	1.2724	
Σr_{ij}^2		.8783	.9689	.9641	.3692	.4429	
B_{eo}^2		.5201	.6241	.6350	.1804	.2131	
Pattern B (Neg.) (loadings)		.7212	.7900	.7969	.4251	.4616	

Table 50

Calculation of the Multiple Correlation, Beta Weights and Regression Equation for Personality Pattern B (Negative) Based on the Class Play

Class Play Items		5
22. Suspicious, not trusted	5	1.0000
17. Sloppy dresser	4	.5812
16. Laziest person in the world	3	.5847
14. Careless with others property	2	.3536
12. Hermit	1	.2719
Pattern B (Negative)	0	.7212
	4.5	
	3.5	
	2.5	
	1.5	
	0.5	
	3.45	
	2.45	
	1.45	
	0.45	
	2.345	
	1.345	
	0.345	
	1.2345	
	0.2345	
	0.12345	

$\beta_{01.2345} = .0769$
$\beta_{02.1345} = .0868$
$\beta_{03.1245} = .3816$
$\beta_{04.1235} = .3693$
$\beta_{05.1234} = .2319$

Check:
$\Sigma r\beta_i C_{oi} = .8355$
$R^2 = .8355$
$R = .9141$

$$z_0 = .08z_{12} + .09z_{14} + .38z_{16} + .37z_{17} + .23z_{22} - 7.5$$

Table 50--(Continued)

4	3	2	1	0	Total
.5812	.5847	.3532	.2719	.7212	3.5122
1.0000	.5953	.2849	.4422	.7900	3.6936
	1.0000	.3590	.3728	.7969	3.7087
		1.0000	.1855	.4251	2.6077
			1.0000	.4616	2.7340
				1.0000	4.1948
.6622	.2555	.0796	.2842	.3708	1.6523
.3858	.6581	.1525	.2138	.3752	1.6551
.1202		.8752	.0895	.1704	1.3672
.4291			.9261	.2655	1.7790
.5600				.4799	1.6618
	.5595	.1218	.1042	.2321	1.0176
	.2177	.8656	.0553	.1259	1.1686
	.1862		.9041	.1064	1.0700
	.4148			.2723	.7365
		.8391	.0326	.0759	.9471
		.0388	.7847	.0632	.8805
		.0890		.1760	.3144
			.7823	.0603	.8438
			.0769	.1692	.2294
				.1646	.1645

SOCIAL ACCEPTANCE

As mentioned in Chapter IV, above, the measure of Social Acceptance is a derived sociometric rating based on the number of Like Most minus the number of Like Least votes received from the child's classmates. Four annual sociometric surveys were conducted in the Castleberry School District and four scores, one for each year, were available on each child. In order to maximize the reliability of the measure, the LD z-score was averaged over the four yearly scores. This measure is alternately referred to as Peer Acceptance-Rejection.

CHAPTER VI

FINAL RESULTS

CENTRAL HYPOTHESIS

The hypothetical linkages described in Chapter III, above, were tested by intercorrelating the variables at four levels for the 75 families with complete data (Table 51) and for the 97 families on which data were available for the mothers and children but not the fathers (Table 52).

Several measures were constructed which represent the negative poles of the variables described in connection with the central hypothesis. These measures were (1) Family Tension, (2) Maternal Protecting, (3) Paternal Protecting, (4) Parental Disagreement (Loving-Rejecting), (5) Parental Disagreement (Casual-Demanding), (6) The Child's Big Problems, (7) Health Problems of the Child, (8) Personality Pattern A (Negative) Class Play, and (9) Pattern B (Negative) Class Play.

On the 91 intercorrelations for the sample of 75 complete families (Table 51), 25 coefficients were not significantly greater than zero. Of the 25 non-significant coefficients, 19 involved the two measures of parental protecting (Roe's Factor O, Overt concern for the child); 4 involved Consensual Casual-Demanding, and 2 involved

Table 51

Results: Tests of Hypothetical Linkages Among Measures of Four Levels for 75 Families

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13
A. Family Background													
1. Social Level													
2. Family Tension	-47**												
B. Parental Child-Rearing Practices													
3. Consensual Loving-Rejecting	23*	-31**											
4. Consensual Casual-Demanding	21	-11	54**										
5. Maternal Protecting	-28*	28*	-25*	-32**									
6. Paternal Protecting	-04	15	-21	-12	43**								
7. Parental Disagreement (L-R)	-30**	37**	-34**	-12	-01	-04							
8. Parental Disagreement (C-D)	-26*	41**	-36**	-04	-07	01	44**						
C. Characteristics of the Child													
9. IQ	53**	-38**	35**	29**	-06	-16	-21	-30**					
10. Self-Concept	33**	-35**	52**	36**	-14	-13	-28*	-28*	44**				
11. Health Problems	-31**	45**	-53**	-32**	20	06	40**	27*	-28*	-41**			
12. Pattern A (TR)	28*	-33**	33**	26*	-15	-25*	-12	-23*	41**	39**	-30**		
13. Pattern B (TR)	30**	-31**	40**	29**	-15	-10	-23*	-29**	37**	35**	-42**	72**	
D. Social Acceptance of the Child													
14. Peer Acceptance-Rejection	26*	-44**	48**	29**	-12	-07	-26*	-31**	53**	62**	-50**	57**	48**

Decimals omitted; *p < .05; **p < .01.

Table 52

Results: Tests of Hypotheses by Measures of Four Levels
for Mothers and Children of 97 Families

Measure	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
A. Family Background																					
1. Social Level																					
2. Family Tension	-47**																				
B. Parent Child-Rearing Practices																					
3. Loving-Rejecting C/F	24*	-26**																			
4. Loving-Rejecting C/M	36**	-23*	73**																		
5. Loving-Rejecting M/C	37**	-27**	26**	24*																	
6. Casual-Demanding C/F	13	-15	39**	28**	26**																
7. Casual-Demanding C/M	15	-11	41**	40**	10	71**															
8. Casual-Demanding M/C	30**	-16	28**	36**	27**	29**	33**														
9. Paternal Protecting C/F	-06	-05	41**	25*	-11	-13	-06	03													
10. Maternal Protecting C/M	06	-04	29**	32**	-10	-18	-10	20*	72**												
11. Maternal Protecting M/C	-13	19	-12	-17	-13	-14	-07	-44**	00	03											
12. Parental Disagreement (L-R)	-25*	32**	-37**	-16	-10	-13	-08	06	-37**	-13	02										
13. Parental Disagreement (C-D)	-21*	32**	-30**	-21*	00	-08	-09	04	-21*	-02	-03	40**									
C. Characteristics of the Child																					
14. IQ	48**	-35**	42**	41**	21*	08	08	14	12	12	-02	-17	-25*								
15. Self-Concept	31*	-26**	56**	56**	21*	22*	32**	20*	17	07	-09	-24*	-24*	43**							
16. Big Problems	-26**	18	-47**	-46**	-19	-28**	-25*	14	-17	-11	18	26**	28**	-42**	-64**						
17. Health Problems	-31**	39**	-53**	-40**	-29**	-25*	-23*	-18	-12	-05	19	33**	27**	-35**	-48**	51**					
18. Pattern A (TR)	24*	-31**	32**	33**	36**	23*	19	26**	00	06	-21*	-13	-18	35**	43**	-39**	-36**				
19. Pattern B (TR)	26**	-34**	40**	38**	32**	24*	25*	23*	07	08	-20*	-19	-17	38**	40**	-35**	-43**	73**			
20. Pattern A (Neg.) Class Play	-13	25*	-09	-23*	07	-06	-13	-17	11	-01	21*	13	00	-24*	-31**	38**	18	-33**	-15		
21. Pattern B (Neg.) Class Play	-27**	34**	-35**	-33**	-28**	-23*	-25*	-21*	-07	01	20*	18	06	-44**	-52**	47**	52**	-55**	-67**	21*	
D. Social Acceptance of the Child																					
22. Peer Acceptance-Rejection	27**	-47**	54**	38**	27**	25*	25*	17	22*	13	-06	-26**	-24*	54**	61**	-49**	-53**	56**	54**	-23*	-64**

Decimals omitted; *p < .05; **p < .01.

Parental Disagreement (Loving-Rejecting).

A larger number of measures was included for the sample of 97 mother-child families to replace the variables which had been developed for the total family, but could not be used because of the lack of measures on all of the family members, especially the fathers.

Of the 231 coefficients presented in Table 52, 144 were significantly greater than zero. Forty-seven of the 87 non-significant correlations involved three measures of Protectiveness; an additional 15 non-significant correlations involved mothers' self-reports of Loving-Rejecting and Casual-Demanding; 8 more involved Class Play Pattern A (Neg.); 13 others involved the two measures of Parental Disagreement; four of the remaining five involved the child's perception of Casual-Demanding parents.

Linkages in the Network of Relations

Social Level.--The six primary factors which define areas of family background were correlated with 17 measures selected from the other levels for the purpose of evaluating the theoretical position taken with respect to Social Level (Table 53). In terms of the number of significant correlations, the three factors (I, V, VI) which compose the second-order factor of Social Level account for 31 of the 44 coefficients which exceed the .05 level.

Family Tension.--The correlates of Family Tension

Table 53

Comparison of Correlations of Six Family Background Factors with Selected Measures of Parental Child-Rearing Practices and Characteristics of the Child

Compared Variables	N	Primary Factors I Economic Level	II Family Size	III Material Goods	IV Employment Stability	V Father's Education	VI Mother's Education
A. Background							
1. Family Tension	97	-50**	23*	-29**	-41**	-40**	-25*
B. Parent Child-Rearing Practices							
1. Consensual Loving-Rejecting	75	25*	26*	-13	11	16	13
2. Loving-Rejecting C/F	97	24*	-19	12	10	20*	18
3. Loving-Rejecting C/M	97	29**	-28**	12	02	29**	36**
4. Loving-Rejecting F/C	75	18	02	23*	04	19	09
5. Loving-Rejecting M/C	97	35**	-14	24*	26**	26**	32**
6. Parental Disagreement L-R	97	-26**	03	-03	-11	-29**	-04
7. Consensual Casual-Demanding	75	26*	-21	22	16	03	25*
8. Casual-Demanding C/F	97	15	-09	05	19	04	13
9. Casual-Demanding C/M	97	18	-01	13	06	10	11
10. Casual-Demanding F/C	75	16	-19	15	12	17	15
11. Casual-Demanding M/C	97	30**	-29**	20*	11	19	29**
12. Parental Disagreement C-D	97	-28**	-03	00	-15	-17	-05
C. Characteristics of the Child							
13. IQ	97	40**	-19	13	08	46**	34**
14. Self-Concept	97	34**	-14	20*	12	26**	15
15. Health Problems	97	-32**	19	-19	-10	-21*	-26**
16. Big Problems	97	-24*	22*	-16	-14	-23*	-18
D. Social Acceptance of the Child							
17. Peer Acceptance-Rejection	100	27**	-05	27**	15	28**	13

Decimals omitted; *p < .05; **p < .01.

were in the expected direction with the bulk of the coefficients reaching significance.

The items of the Family Tension scale were correlated with the measure of Peer Acceptance-Rejection in the interest of confirming associations reported by Sells and Roff (1964a). Table 54 shows that 11 of the 17 items reached significance ($p < .05$), and all items were in the expected direction.

Parent Child-Rearing Practices.--In order to assess the dimensions at this level, the several measures of Loving-Rejecting (Table 55), Casual-Demanding (Table 56), and Protectiveness (Table 57) were correlated with selected variables at each of the other levels. Since it was desired to compare measures from the frame of reference of each family member, father, mother, and child, the sample of 75 complete families was used for this analysis.

Only 15 of the 66 correlations (Table 55) of Loving-Rejecting failed to reach significance. As indicated below, six of the insignificant correlations may be the consequence of the lack of construct validity of Class Play Pattern A (Neg.). Of the remaining 9 insignificant correlations, five were associated with the fathers' self-report of Loving-Rejecting.

Excluding Class Play Pattern A (Neg.), 38 of the 60 correlations of Casual-Demanding, across frames of reference with selected variables at the other levels, were significant.

Table 54

Correlations of Items of the Family Tension Scale with Social Acceptance of the Child As Measured by Peer Acceptance-Rejection (N = 100)

Item	Correlation
1. Mother Baby Sits, etc.	-11
2. Mother contributes 50% or more etc.	-26*
3. Mother completed higher grade than father	-31**
4. Mother has eighth grade education or less	-20*
5. Father not regularly employed	-21*
6. History of serious illness in family	-21*
7. Death of immediate family member	-20*
8. Previous marriage by either parent	-18
9. Parents separated or divorced	-20*
10. The child-subject was adopted	-16
11. Mother says marriage is not a happy one	-15
12. More than three children in the family	-16
13. Half, step, or adopted sibling etc.	-22*
14. Either parent married more than twice	-20*
15. No adult male living at home	-11
16. Psychiatric history of any member	-20*
17. Discrepancy (+ 1σ) between father's educational level minus his occupational level	-22*
18. Total score	-51**

Decimals omitted; *p < .05; **p < .01.

Table 55

Comparison of Measures of Loving-Rejecting from Differing Frames of Reference with Selected Variables at Other Levels (N = 75)

Compared Variables	Frames of Reference of Loving-Rejecting					
	Con-sensual	Child/ Father	Child/ Mother	Father Self-Report	Mother Self Report	Parental Disagree-ment (Child)
A. Family Background						
1. Social Level	23*	20	27**	19	36**	-30**
2. Family Tension	-31**	-26**	-17	-30**	-23*	37**
C. Characteristics of the Child						
4. IQ	35**	33**	30**	19	29**	-21
5. Self-Concept	52**	53**	53**	13	22*	-28**
6. Big Problems	-45**	-44**	-35**	-17	-25*	42**
7. Health Problems	-53**	-48**	-33*	-35**	-35**	40**
8. Pattern A (TR)	33**	27**	29**	27**	39**	-12
9. Pattern B (TR)	40**	38**	34**	21	30**	-23*
10. Pattern A (Neg.) Class Play	-07	-07	-14	-15	11	07
11. Pattern B (Neg.) Class Play	-41**	-37**	-32**	-32**	-30**	32**
D. Social Acceptance of the Child						
12. Peer Acceptance-Rejection	48**	43**	32**	39**	24*	-26*

Decimals omitted; $*p < .05$; $**p < .01$.

Table 56

Comparison of Measures of Casual-Demanding from Differing Frames of Reference with Selected Variables at Other Levels (N = 75)

Compared Variables	Frames of Reference of Casual-Demanding Con-sensual	Child/ Father	Child/ Mother	Father Self-Report	Mother Self-Report	Parental Disagree-ment (Child)
A. Family Background						
1. Social Level	21	14	18	20	26*	-26*
2. Family Tension	-11	-09	-05	-22*	00	41**
C. Characteristics of the Child						
4. IQ	29**	22*	26*	27*	11	-30**
5. Self-Concept	36**	27*	39**	25*	19	-28*
6. Big Problems	-39**	-30**	-37**	-32**	-17	26*
7. Health Problems	-32**	-30**	-37**	-32*	-17	27*
8. Pattern A (TR)	26*	25*	16	25*	07	-23*
9. Pattern B (TR)	29**	23*	24*	29**	10	-29**
10. Pattern A (Neg.) Class Play	-11	-07	-17	-01	-07	-02
11. Pattern B (Neg.) Class Play	-32**	-24*	-29**	-34**	-08	24*
D. Social Acceptance of the Child						
12. Peer Acceptance-Rejection	29**	22*	26*	27*	11	-31**

Decimals omitted; *p < .05; **p < .01.

Table 57

Comparison of Measures of Protectiveness from Differing Frames of Reference with Selected Variables at Other Levels (N = 75)

Compared Variables	Frames of Reference of Protectiveness			
	Child/ Father	Child/ Mother	Father Self-Report	Mother Self-Report
A. Family Background				
1. Social Level	-05	-01	-04	-28*
2. Family Tension	-05	04	15	28*
C. Characteristics of the Child				
4. IQ	06	05	-16	-06
5. Self-Concept	11	-03	-13	-14
6. Big Problems	-15	-03	15	29**
7. Health Problems	-04	08	06	20
8. Pattern A (TR)	-05	-03	-25*	-15
9. Pattern B (TR)	04	03	-10	-15
10. Pattern A (Neg.) Class Play	20	08	09	11
11. Pattern B (Neg.) Class Play	-08	05	18	27*
D. Social Acceptance of the Child				
12. Peer Acceptance-Rejection	15	01	-07	-12
Intercorrelation of Measures of Protectiveness				
13. Child/Father		70**	12	03
14. Child/Mother			04	-01
15. Father's Self-Report (Paternal Protecting)				43**
16. Mother's Self-Report (Maternal Protecting)				

Decimals omitted; *p < .05; **p < .01.

For this dimension, the mothers' self-report demonstrated the fewest number of significant correlations (Table 56).

The measure of Protectiveness, correlated across frames of reference with selected variables, produced only 5 significant correlations out of 34 tests, excluding Class Play Pattern A (Neg.). The intercorrelations of this measure among frames of reference evidenced inter-child agreement and inter-parental agreement, but a lack of parent-child agreement (Table 57).

CHARACTERISTICS OF THE CHILD

Since the results with respect to IQ, Self-Concept, and the Child's Big Problems are reported under headings involving other variables they need not be repeated here. The variables which measure Health Problems and personality traits are presented in detail below.

Health Problems.--The 33 items of the Health Problems scale were correlated with measure of Loving-Rejecting from three frames of reference, the child's perception of the father, the child's perception of the mother, and the mother's self-report (Table 58). Only three items (16, 29, 30) were significantly correlated across all three modes of measuring Loving-Rejecting; seven items (1, 5, 6, 7, 12, 28, 33) reached significance on two of the three measurement modes. Several items (7, 12, 29, 33) were more highly correlated with the mother's self-report on Loving-Rejecting than was the total score.

Table 58

Correlations of Items of Health Problems Scale with Factors of Loving-Rejecting from Frames of Reference of Child and Mother's Self-Report (N = 97)

Item	Loving-Rejecting		
	Child's Perception of		Mother Self-Report
	Father	Mother	
1. Born before expected	-31**	-22*	-01
2. Pre-natal complications	-08	-08	-07
3. Birth complications	-14	-14	-12
4. Baby's health (poor)	01	-02	-25**
5. Slow walking (over 13 mo.)	-22*	-23*	01
6. Slow talking (over 15 mo.)	-29**	-22*	-09
7. Slow learner as a baby	-20*	-11	-36**
8. Illness associated with brain damage etc.	-25**	-13	-04
9. High fevers (over 104°)	-06	-01	-03
10. Visual problem	-04	08	-02
11. Hearing problem	-25*	-12	-03
12. Speech problem	-24*	-08	-34**
13. Wets the bed	-11	03	-04
14. Has been unconscious	-18	-19*	08
15. Severely burned	11	00	-09
16. Serious accident or injury	-32**	-24**	-27**
17. Asthma, hay fever, or allergy	15	14	22*
18. Teeth need straightening	-03	00	06
19. Bad dreams	-06	-12	-03
20. Sleep walks	-03	-03	02
21. Sleeps with adults	-16	-09	-08
22. Afraid of Dark	02	-07	-03
23. Child's present health (fair or poor)	-13	-16	-09
24. Health bothers mother	-25*	-12	-13
25. Takes medicine regularly	-10	-03	05
26. Has been hospitalized	-12	-21*	-12
27. Health restricts child's play	-06	02	10
28. Frequent school absence for illness	-34**	-21*	-13
29. Adjustment of concern to teacher	-21*	-21*	-35**
30. Less attentive than most in school	-27**	-35**	-20*

Table 58--(Continued)

Item	Loving-Rejecting		
	Child's Perception of		Mother Self-Report
	Father	Mother	
31. Constantly moves about in class	-14	-15	-21*
32. Much less active than most in class	-14	-02	07
33. Below average athletic ability	-26**	-18	-30**
Total Health Problems Score	46 -~~53~~**	-40**	-29**

Decimals omitted; *p < .05; **p < .01.

Personality Traits

Teacher Ratings.--The 23 teacher-rating traits were correlated (Table 59) with measures from all four levels for the 75 fathers and for the 97 mother and child family combinations. The measure of Peer Acceptance-Rejection was based on the sample of 100 children.

Only one teacher rating scale (23 Adventurous, bold) failed to produce a significant correlation with at least one of the included measures. The significant relationships were in the direction expected.

The five scales used to measure Pattern A (Sizothymia versus Affectothymia) had a total of 50, out of a possible 85, significant correlations across the 17 measures. For the four scales which compose Pattern B (Superego Strength), 53 of the 68 correlations were significant.

The numbers of significant correlations for 17 variables, across 23 teacher trait ratings, are summarized as follows.

Family Background: 25 of 46 (54 per cent)

Parent-Child Relations: 95 of 230 (41 per cent)

    Loving-Rejecting: 50 of 92 (54 per cent)

    Casual-Demanding: 27 of 92 (29 per cent)

    Parental Disagreement: 18 of 46 (39 per cent)

    Child's perception of parent: 21 of 138 (15 per cent)

    Mother's self-report: 19 of 46 (41 per cent)

Father's self-report: 17 of 46 (37 per cent)

Mothers (C/M and M/C): 35 of 92 (38 per cent)

Fathers (C/F and F/C): 42 of 92 (46 per cent)

Characteristics of the Child: 72 of 92 (78 per cent)

Intelligence Quotient: 17 of 23 (74 per cent)

Self-Concept: 19 of 23 (83 per cent)

Health Problems: 18 of 23 (78 per cent)

Big Problems: 18 of 23 (78 per cent)

Social Acceptance: 20 of 23 (87 per cent)

Total: 212 of 391 (54 per cent)

Class Play Traits.--Examination of the 357 coefficients produced by correlating 21 items (excluding 5 and 7 which pertained to girls only) of the Class Play with 17 measures selected from the four theoretical levels of interest to the study indicated that 162 of the coefficients were significant and in the expected direction (Table 60).

The four items which composed Pattern A (Neg.) yielded only 22 significant correlations, representing about 34 per cent of the total number of correlations with the items of this composite scale.

Pattern B (Neg.), a five item composite, yielded 61 significant correlations or about 71 per cent of the total number of correlations with these five items.

The remaining 14 items were included in neither of the above mentioned personality patterns. However, 33 per cent of the total number of correlations (79 of 238) with these items

Table 59

Correlations of Measures of Family Background Factors, Parent Child-Rearing Practices and Characteristics of the Child with Teachers' Ratings of Personality Traits

Trait Scale	Social Level	Family Tension	Loving-Rejecting				Casual		Demanding		Parental Disagreement		IQ	Self-Concept	Health Problems	Big Problems	Peer Acceptance-Rejection
			C/F	C/M	F/C	M/C	C/F	C/M	F/C	M/C	L-R	C-D					
Pattern A (Sizothymia vs Affectothymia)																	
1. Non-aggressive, kind, considerate	11	-09	18	18	22*	21*	23*	16	06	19	12	11	24*	20*	-18	-20*	32**
5. Conscientious, trustworthy	28**	-27**	28**	38**	21	28**	18	18	25*	09	-19	-14	32**	44**	-47**	-41**	39**
14. Adaptable flexible	17	-25**	38**	26**	19	11	20*	07	23*	18	-25*	-17	37**	37**	-31**	-27**	50**
21. Cooperative, compliant, obedient	21*	-29**	19	22*	27*	30**	16	16	21*	23*	-10	-18	24*	29**	-25*	-26**	43**
22. Suspicious of others	-15	21*	-29**	-26**	-18	-34**	-19	-15	-18	-26**	09	16	-26**	-37**	25*	34**	-48**
Pattern B (Superego Strength)																	
10. Responsible	19	-25*	36**	31**	16	26**	26**	29**	24*	21*	-05	-07	32**	33**	-36**	-24*	42**
11. Perservering, determined	29**	-31**	36**	37**	11	23*	21*	18	29**	16	-18	-09	39**	40**	-36**	-29**	57**
13. Neat, tidy, orderly	22*	-39**	34**	30**	23*	21*	04	13	14	15	-25*	-25*	40**	34**	-42**	-40**	52**
15. Careful with property of others	23*	-28*	31**	33**	20	37**	23*	20*	28**	24*	-25*	-21*	25*	32**	-36**	-32**	46**
Other Trait Scales																	
2. Popular, generally well liked	24*	-40**	49**	36**	28*	32**	38**	32**	37**	19	-23*	-18	48**	58**	-56**	-47**	75**
3. Good general health	09	-11	19	19	13	-03	01	03	01	13	-14	04	19	16	-30**	-06	20*
4. Learns fast	35**	-28**	37**	32**	12	15	05	00	08	04	-23*	-29**	68**	47**	-36**	-34**	49**
6. Prefers not to be noticed	-05	05	05	08	08	01	12	-01	07	23*	03	07	-03	05	-10	-24*	05
7. Placid, free from distress	11	-23*	33**	15	20	26**	03	-01	15	-01	-26**	-14	20*	32**	-27**	-28**	40**
8. Calm, relaxed	18	-33**	20*	11	27*	12	20*	17	24*	10	-27**	-10	14	20*	-31**	-27**	39**
9. Cheerful	13	-31**	31**	13	09	10	02	09	19	09	-24*	-28**	22*	26**	-25*	-08	38**
12. Imaginative	14	-08	01	-07	02	-25*	-17	-13	-04	-20*	-14	-16	14	08	01	-03	-03
16. Aesthetically sensitive	22*	-17	30**	26**	09	14	10	14	18	-06	-14	-20*	45**	26**	-16	-24*	27**
17. Follows instructions easily	36**	-31**	34**	31**	26*	24*	18	09	19	03	-19	-24*	56**	45**	-43**	-42**	55**
18. Outgoing mixes freely	22*	-27**	42**	24*	10	33**	20*	11	27**	16	-24*	-27**	28**	35**	-31**	-23*	49**
19. Associates mostly with own sex	-10	13	-29**	-15	-19	-11	06	08	-16	06	22*	11	-18	-29**	29**	17	-40**
20. Prefers games with many children	04	-13	40**	19	22*	16	07	-01	21*	00	-34**	-15	22*	40**	-26**	-25*	44**
23. Adventurous, bold	-02	03	14	01	00	-11	-13	-18	06	01	-02	05	01	15	-08	06	16
N	97	97	97	97	75	97	97	97	75	97	97	97	97	97	97	97	100

Decimals omitted; *p < .05; **p < .01.

Table 60

Correlations of Measures of Family Background Factors, Parent Child-Rearing Practices and Characteristics of the Child with Class Play Items

Class Play Items	Family Social Level	Family Tension	Loving-Rejecting				Casual-Demanding				Parental Disagreement		IO	Self-Concept	Health Problems	Big Problems	4-year Average of Ratings of Acceptance-Rejection	Concurrent Rating of Peer Acceptance-Rejection
			C/F	C/M	F/C	M/C	C/F	C/M	F/C	M/C	L-R	C-D						
Personality Pattern A																		
3. Someone who often gets angry etc.	-13	26**	-09	-22*	-10	14	-04	-14	03	-15	11	-01	-23*	-30**	17	29**	-12	-20*
10. A bully etc.	-13	23*	-06	-16	-23*	-10	-11	-05	-19	-23*	05	01	-17	-31**	13	39**	-18	-24*
13. A person with a very bad temper	-01	08	01	-14	05	23*	02	-11	09	-04	10	-06	-14	-12	04	24*	-03	-10
21. Stubborn as a mule	-14	18	-23*	-25*	-42**	-11	-08	-07	12	-01	27**	20*	-26**	-32**	33**	33**	-24*	-36**
Personality Pattern B																		
12. A hermit etc.	-19	20*	-52**	-28**	-19	-28**	-06	-03	-31**	-14	28**	11	-37**	-41**	33**	32*	-47**	-53**
14. Careless with others property	-02	10	-24*	-12	-36**	-04	-25*	-25*	-30**	-10	13	06	-18	-22*	22*	23*	-35**	-47**
16. Laziest person in the world	-22*	21*	-28**	-37**	-25*	-24*	-10	-13	-25*	-17	21*	01	-38**	-48**	46**	42**	-39**	-49**
17. Sloppy dresser	-22*	30**	-31**	-20*	-28**	-26**	-21*	-29**	-22*	-14	10	05	-32**	-38**	45**	38**	-42**	-52**
22. A suspicious character	-27**	35**	-20*	-25*	-20*	-20*	-26*	-22*	-31**	-23*	08	05	-41**	-44**	41**	38**	-41**	-62**
Other Items																		
1. A kind, considerate friend	26**	-32**	28**	19	28**	20*	-08	-05	17	-01	-20*	-20*	29**	25*	-28**	-16	48**	55*
2. Someone who is often afraid etc.	-06	14	-25*	-11	-15	-20*	-18	-16	-10	-04	03	03	-24*	-35**	22*	32**	-39**	-45**
4. Someone who is stuck-up etc.	-03	13	11	01	-06	06	00	06	-06	-14	04	-21*	-06	09	-05	07	-13	-15
6. A mean, cruel boss	-03	22*	-05	-20*	-17	05	-14	-12	07	-28**	-07	-13	-17	-09	05	20*	-18	-20*
8. Someone who is fickle etc.	-09	09	-02	-15	-25*	-05	-12	-12	-07	-15	11	10	-11	-03	07	20*	-08	-22*
9. Someone who is very smart etc.	21*	-19	26**	20*	-01	04	18	18	12	08	-11	-07	37**	25*	-21*	-25*	34**	30**
11. Someone whom everyone likes etc.	30**	-33**	33**	24*	19	16	14	19	33**	23*	-18	-18	41**	30**	-32**	-26**	46**	52**
15. Careful with others property	18	-28**	38**	45**	20*	24*	17	15	04	10	-26**	-12	38**	39**	-28**	-25*	38**	44**
18. Someone who is good natured etc.	23*	-35**	28**	21*	22*	19	06	00	21*	03	-19	-11	37**	36**	-29**	-32**	47**	55**
19. A lawyer who likes to argue	00	09	-11	-09	-17	-02	-06	-15	-21*	-13	-03	-08	-10	-02	02	08	-11	-06
20. A detective who is suspicious etc.	-12	08	-07	05	-08	-10	-29**	-17	-11	-12	05	06	-04	00	17	05	-23*	-16
23. Someone to be class president	29**	-26**	34**	29**	12	12	18	20*	19	11	-16	-11	41**	30**	-31**	-26**	48**	48**
N	97	97	97	97	75	97	97	97	75	97	97	97	97	97	97	97	100	100

Decimals omitted; *p < .05; **p < .01.

was significant.

A summary, by level of theoretical interest, of the number of significant correlations follows.

Family Background: 20 of 42 (48 per cent)

Parent Child-Relations: 70 of 210 (33 per cent)

  Loving-Rejecting: 43 of 84 (51 per cent)

  Casual-Demanding: 19 of 84 (23 per cent)

  Parental Disagreement: 8 of 42 (19 per cent)

  Child's Perception of Parents: 32 of 84 (38 per cent)

  Mother's self-report: 12 of 42 (29 per cent)

  Father's self-report: 18 of 42 (43 per cent)

  Mothers (C/M and M/C): 28 of 42 (67 per cent)

  Fathers (C/F and F/C): 34 of 42 (81 per cent)

Characteristics of the Child: 58 of 84 (69 per cent)

  Intelligence Quotient: 13 of 21 (62 per cent)

  Self-Concept: 15 of 21 (71 per cent)

  Health Problems: 12 of 21 (57 per cent)

  Big Problems: 17 of 21 (81 per cent)

Social Acceptance: 14 of 21 (67 per cent)

  Total: 162 of 357 (45 per cent)

The sociometric measure of Peer Acceptance-Rejection taken concurrently with the Class Play, as well as the four-year average of LD z-scores, was included (Table 60). Comparison of these two measures indicated: (1) Of the 21 Class Play items correlated with each measure of Peer

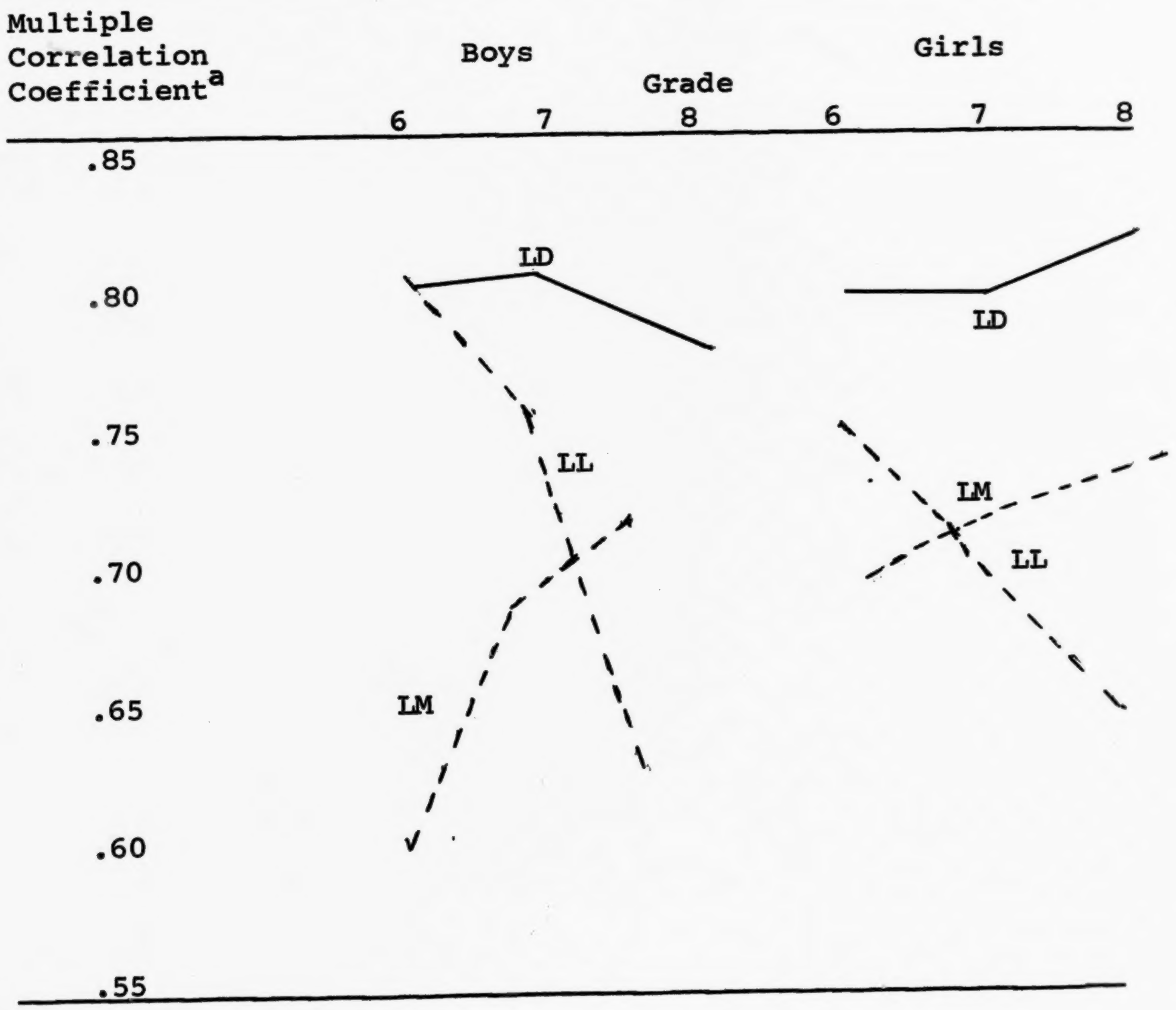
Acceptance-Rejection, none differed in sign; (2) the concurrent measure had 17 significant correlations, the measure averaged over four years had 14 significant correlations; (3) using Fisher's z transformations of r (McNemar, 1955), the concurrent measure had an average correlation with the 21 Class Play traits of .42 while that for the four-year average score was .32 (CR of the difference equals 4.23, $p < .01$).

In order to test the assumption that the measures of Social Acceptance reflect the stimulus value of the child, the multiple correlation of six Class Play items (1, 12, 14, 17, 18, 22) with the concurrent measure of Peer Acceptance-Rejection was computed. The results ($R = .84$) indicated that these traits accounted for 71 per cent of the variance in the criterion (concurrent LD score).

Since the Class Play and sociometric rating instruments were administered concurrently to a large number of pupils from which the study sample was drawn, the relation of grade, sex, and positive and negative Class Play items to positive (LM) and negative (LL) sociometric choices and the derived measure of Peer Acceptance-Rejection (LD) was examined (Table 61). Twelve negatively oriented traits (2, 3, 7, 8, 10, 12, 13, 14, 16, 17, 21, 22) were used as predictors of LL for the boys; for girls the number of negative predictors of LL was increased to 13 by adding one item (number 4). Seven predictors (1, 5, 9, 11, 16, 18, 23) of LM were used for boys

Table 61

Multiple Correlations of Class Play Items with Criteria of Like Most, Like Least and Like Difference by Grade and Sex of the Child



Criteria	6	7	8	6	7	8
LM	.5988	.6838	.7247	.7033	.7300	.7448
LL	.8053	.7696	.6215	.7445	.7124	.6304
LD	.8029	.8075	.7811	.7991	.7471	.8157
Grade:	6	7	8	6	7	8
Number:	168	170	160	164	189	156

[a] See text for list of independent variables.

and for girls. The combined positive and negative traits (19 for boys, 20 for girls) were used to predict LD. These results (Table 58) suggest some systematic changes with age with respect to the correlates of LL and LM, while the correlates of LD tend to remain stable with age.

MULTIVARIATE ANALYSIS OF RESULTS

Variance reduction methods (DuBois, 1957) were employed to compute multiple and multiple partial correlations in order to investigate the multivariate relations among the pivotal linkages in the hypothetical matrix. Separate analyses were made for the sample of 75 complete families (Table 51) and for the sample of 97 families on which mother and child data were available (Table 52).

The variables included at each of three successive levels were grouped when used as predictors in a multiple correlation, in order to represent the relative influence of each level. Table 62 reports the relative influence of measures of (A) Family Background, (B) Parent Child-Rearing Practices, and (C) Characteristics of the Child on measures at each of the other levels.

Table 63 reports a proportional analysis of the predicted criterion variance, using five measures of Characteristics of the Child and Social Acceptance as criteria. The results indicate the relative influence of Family Background and Parent Child-Rearing Practices on each of the six criteria.

Table 62

Multiple Correlations Among Successive Levels of the Matrix Model (N = 75 Families)

Predictors	Criterion	Multiple Correlation Coefficient	Per Cent of Criterion Variance
1. Social Level 2. Family Tension	3. Loving-Rejecting	.32	10.4
	4. Casual-Demanding	.21	4.6
	7. Parental Disagreement (L-R)	.24	6.0
	8. Parental Disagreement (C-D)	.42	17.3
	9. IQ	.55	30.0
	10. Self-Concept	.40	16.0
	11. Health Problems	.47	21.6
	12. Pattern A (TR)	.36	12.9
	13. Pattern B (TR)	.35	12.5
	14. Peer Acceptance-Rejection	.44	19.7
3. Loving-Rejecting 4. Casual-Demanding 7. Parental Disagreement (L-R) 8. Parental Disagreement (C-D)	1. Social Level	.38	14.3
	2. Family Tension	.48	22.8
	9. IQ	.41	16.8
	10. Self-Concept	.55	29.9
	11. Health Problems	.58	34.0
	12. Pattern A (TR)	.37	13.7
	13. Pattern B (TR)	.45	19.9
	14. Peer Acceptance-Rejection	.51	25.8
9. IQ 10. Self-Concept 11. Health Problems 12. Pattern A (TR) 13. Pattern B (TR)	1. Social Level	.56	31.0
	2. Family Tension	.54	29.6
	3. Loving-Rejecting	.64	41.1
	4. Casual-Demanding	.45	20.4
	7. Parental Disagreement (L-R)	.43	18.9
	8. Parental Disagreement (C-D)	.39	15.5
	14. Peer Acceptance-Rejection	.77	59.7
1. Social Level 2. Family Tension 3. Loving-Rejecting 4. Casual-Demanding 7. Parental Disagreement (L-R) 8. Parental Disagreement (C-D)	9. IQ	.61	37.6
	10. Self-Concept	.58	34.2
	11. Health Problems	.64	40.2
	12. Pattern A (TR)	.45	19.9
	13. Pattern B (TR)	.48	23.4
	14. Peer Acceptance-Rejection	.57	33.1
1. Social Level 2. Family Tension 9. IQ 10. Self-Concept 11. Health Problems 12. Pattern A (TR) 13. Pattern B (TR)	3. Loving-Rejecting	.64	41.4
	4. Casual-Demanding	.46	21.5
	7. Parental Disagreement (L-R)	.46	21.2
	8. Parental Disagreement (C-D)	.40	15.9
	14. Peer Acceptance-Rejection	.79	62.2
3. Loving-Rejecting 4. Casual-Demanding 7. Parental Disagreement (L-R) 8. Parental Disagreement (C-D) 9. IQ 10. Self-Concept 11. Health Problems 12. Pattern A (TR) 13. Pattern B (TR)	1. Social Class	.60	36.2
	2. Family Tension	.60	36.2
	14. Peer Acceptance-Rejection	.77	59.9
All except the criterion (1-4, 7-13)	14. Peer Acceptance-Rejection	.79	62.4

Table 63

Proportional Analysis of Predicted Variance of Characteristics of the Child and Social Acceptance (N = 75 Families)

	Criterion Variable	Criterion Variance Predicted by Levels A and B	Variance Uniquely Predicted by Level A (Family Background)	Variance Uniquely Predicted by Level B (Parent Child Relations	Variance Common to Levels A and B
9.	IQ	.3755 (100%)	.2495 (66%)	.1082 (29%)	.0176 (5%)
10.	Self-Concept	.3419 (100%)	.0610 (18%)	.2167 (63%)	.0642 (19%)
11.	Health Problems	.4055 (100%)	.0998 (25%)	.2414 (59%)	.0643 (16%)
12.	Pattern A (TR)	.1994 (100%)	.0724 (36%)	.0811 (41%)	.0459 (23%)
13.	Pattern B (TR)	.2338 (100%)	.0431 (18%)	.1244 (53%)	.0663 (28%)
14.	Peer Acceptance-Rejection	.3305 (100%)	.0979 (30%)	.1669 (50%)	.0657 (20%)

Predictor Variables

Level A (Family Background)
1. Social Level
2. Family Tension

Level B (Parent Child-Rearing Practices)
3. Loving-Rejecting
4. Casual-Demanding
7. Parental Disagreement (L-R)
8. Parental Disagreement (C-D)

Table 64

Multiple and Multiple Partial Correlational Analysis
of Variance of Social Acceptance

Predictors[a]	Complete Family Sample (N = 75)				Mother-Child Sample (N = 97)			
	Number Variables	Multiple Correlation	Predicted Variance	Per Cent[b]	Number Variables	Multiple Correlation	Predicted Variance	Per Cent
Levels:								
A	3	.44	.20	32	3	.48	.23	33
B	5	.51	.26	41	12	.56	.32	46
C	6	.77	.60	94	7	.77	.60	88
A and B	7	.57	.33	53	14	.65	.42	61
A and C	8	.79	.62	99.7	9	.80	.64	94
B and C	10	.77	.60	96	18	.81	.65	96
A, B and C	12	.79	.62	100	20	.83	.68	100
		Multiple Partial Correlation	Partial Variances	Per Cent		Multiple Partial Correlation	Partial Variances	Per Cent
A.B		.31	.10	16		.38	.15	21
A.C		.25	.06	10		.33	.11	16
A.BC		.25	.06	10		.30	.09	13
AB.C		.26	.07	11		.45	.21	30
AC.B		.70	.49	79		.73	.53	78
B.A		.41	.17	27		.50	.25	36
B.C		.06	.01	07		.36	.13	19
B.AC		.06	.01	06		.33	.11	16
BC.A		.73	.53	85		.77	.59	86
C.A		.73	.53	85		.73	.54	80
C.B		.68	.46	74		.70	.49	72
C.AB		.66	.44	70		.67	.45	67

[a] Variables included at each level are listed in text; number of variables include the criterion.

[b] Indicates per cent of criterion variance predicted by Levels A, B, and C.

The multiple and multiple partial correlations for the two study samples of 75 complete families and 97 mother-child family groups are shown in Table 64. The four-year average of the LD sociometric rating was used as the criterion. The grouping and numbering of variables shown in Tables 51 and 52 were retained.

The seven multiple correlations for each sample were significantly greater than zero ($p < .01$). The number of predictor variables was increased from 4 for the complete family sample, to 11 for the mother-child sample at Level B (Parent Child-Rearing Attitudes) and from 5 to 6 at Level C (Characteristics of the Child).

The symbols which denote the multiple partial correlations are interpretable as follows: B.A, the multiple correlation of the variables at Level B with the criterion when the influence of variables at Level A was partialed out of the criterion and out of the variables composing Level B. AB represents the multiple correlation of the variables at Levels A and B with the criterion.

The results of significance tests (Fisher, 1958; McNemar, 1955) of multiple correlations for each of the two sample groupings are presented in Table 65. These tests indicate whether the multiple R with more predictor variables included is significantly greater than the R with the smaller number of variables. For the complete family sample (N = 75)

Table 65

Significance Tests of Multiple Correlations when the Numbers of Predictors are Increased

Compared Multiple Correlations						F Test of Significance
Levels	R	m	Levels	R	m	
Complete Family Sample (N = 75)						
A	.44	2	AB	.57	7	3.35*
			AC	.79	8	16.09**
			ABC	.79	12	7.82**
B	.51	5	AB	.57	7	3.68*
			BC	.77	10	11.05**
			ABC	.79	12	8.62**
C	.77	6	AC	.79	8	2.17
			BC	.77	10	.03
			ABC	.79	12	.72
ABC	.79	12	AB	.57	7	9.67**
			AC	.79	8	.92
			BC	.77	10	2.07
Mother-Child Sample (N = 97)						
A	.48	3	AB	.65	14	2.42*
			AC	.80	9	25.94**
			ABC	.83	20	6.39**
B	.56	12	AB	.65	14	6.99**
			BC	.81	18	12.46**
			ABC	.83	20	10.89**
C	.77	7	AC	.80	9	5.31**
			BC	.81	13	1.05
			ABC	.83	20	1.51
ABC	.83	20	AB	.65	14	4.40**
			AC	.80	9	.80
			BC	.81	18	3.65*

*$p < .05$; **$p < .01$.

the inclusion of variables at Levels A and B does not increase the correlations significantly above Level C alone in predicting the criterion. For the large sample (N = 97) Level C is not improved by the addition of variables at Level B but is improved by the addition of the Level A variables.

CHAPTER VII

DISCUSSION OF RESULTS

The foregoing results are interpreted as strongly supporting the central hypothesis by demonstrating significant interrelatedness among the four categories of variables. The following discussion integrates the linkages in the network of relations involving family-social, parental, parent-child, child, and child-social variables.

FAMILY BACKGROUND

Social Level.--The measure of Social Level was composed of the estimated common variance of three primary factors (1) Economic Level of the Family, (2) Father's Educational Level, and (3) Mother's Educational Level. This measure was expected to reflect the influence of (1) parental knowledge, skill, understanding, and the role of responsible parenthood, and of (2) factors which contribute to freedom from hardship and deprivation in the matrix of relationships. The results (Tables 51 and 52) provided evidence that such influence existed at each level in the network.

These results indicate that families with high scores on this measure produced and raised children that were at a marked advantage over those whose families scored low on this measure. High Social Level was associated with: (1) a low level of family tension ($r = .47$, $p < .01$), (2) loving rather than rejecting parents, regardless of the mode across which this parental attitude was measured (each of the four correlations of Social Level with measures of Loving-Rejecting was significant), (3) casual rather than punishing or demanding mothers, according to their own self-reports, but not otherwise, (4) consistency of interparental child-rearing practices, (5) high IQ of the child, (6) the development of a positive self-concept in the child, (7) the absence of health problems of the child, (8) socially effective behavior of the child, as rated by the teacher, (9) a positive level of superego strength in the child, and (10) favorable peer relations.

The _a posteriori_ review of the association of selected variables at each level with the six primary factors of family background (Table 53) indicates that the three factors used to construct the Social Level scale had a relatively large number of significant relations with the selected variables. Economic Level appeared to be the most influential single factor. These data suggested that Father's Educational Level is at least as important as Mother's Educational Level in its influence on the network of relations.

Family Tension.--Objective items which were judged to be symptomatic of stress-producing tension were incorporated into this scale. The results suggest that it is a sensitive and conceptually valid measure of tension. With only minor exceptions, the correlates of Family Tension were significant and conformed to theoretical expectations. As conceptualized, Family Tension was significantly related to Social Level, yet exerted independent influence on parent-child relations. This independent influence was tested by the part correlation of Consensual Loving-Rejecting and the residual of Family Tension with Social Level removed ($r_{3(2.1)} = .22$, $p < .05$). Examination of the correlates of Family Tension (Tables 51 and 52) indicates this variable exerted a striking influence on measures of Parental Disagreement, and the Child's Self-Concept, Health Problems, personality trait ratings, and his peer status. These significant associations conform to the hypothesized linkages with Family Tension in the network of relations.

The correlations of the items of the Family Tension scale with the measure of Social Acceptance indicate that 12 of the 17 items were significant. The highest correlation (item 3, $r = -.31$, $p < .01$) keynotes the importance of enlightened fatherhood. The magnitude of that correlation appears to be suppressed; the relatively well-educated father who for some reason, such as inability to adjust in his occupational situation, does not achieve at the level suggested by his educational level reflects a source of tension which can influence the child's peer relations (item 17, $r = -.22$,

$p < .05$). In general, however, these data suggest that events which disrupt the interpersonal harmony in the family produce tension which, in turn, manifests itself at every level in the matrix of relationships.

PARENT CHILD-REARING PRACTICES AND ATTITUDES

Loving-Rejecting.--The pattern similarity analysis (Table 31) strongly supported a dimension of Loving-Rejecting which is stable across groups of differing age and sex. These results (Tables 51 and 52) indicated that this variable was the best single measure of the domain of parental practices and attitudes investigated in this study.

Consensual Loving-Rejecting, a second-order factor constructed on measures of common variance of primary factors of Loving-Rejecting, produced highly significant correlations with 12 of 13 variables in the network (Table 51). Comparison of this measure (Table 55) indicated it was at least as suitable a measure of Loving-Rejecting as any of the remaining four, taken from the frame of reference of either the child or the parent.

Table 55 indicates that the construct of Loving-Rejecting, regardless of the mode of measurement and including parental disagreement on this dimension, had marked influence on the personality and social development of the child. The self-reports of the parents evidenced slightly lower correlations, possibly as a result of the bias of selecting socially desirable responses as indicated in Table 30.

Casual-Demanding.--The second-order factor of Casual-Demanding, like that of Loving-Rejecting, was constructed on the common variance of the primary factor scores of Casual-Demanding. The pattern similarity analysis suggested parent-child differences on this measure, and indicated that mothers, but not fathers, tended to select the more socially desirable response (Table 30) on scales of Demanding and Punishing. The absence of significant correlations (Table 56) with the characteristics and social acceptance of the child on Casual-Demanding measured by mother's self-reports, tends to confirm the bias of this scale. With the exception of the mother's self-report on Casual-Demanding, the several measures of this dimension conform to the hypothesis and form pivotal linkages in the network which are in line with theoretical formulations. The implication that parental child-rearing practices have significant influence on the personality and social development of the child was strongly supported by these data.

Protectiveness.--The analyses of this factor, described in Chapter V, above, indicated a marked absence of common variance between measure modes involving parents and children. The parents' responses were biased in the direction of social desirability on the Protecting and Rewarding (S-L) scales; the similarity analyses indicated quite different structures for parents and for children. The intercorrelations of the primary factor scores on this dimension confirmed a lack of relatedness between measures taken from the frame of reference of the child with those taken from the frame of reference of the parents, yet the only significant correlates with external criteria occur on the scales which measure parental reports (Table 57). The five significant correlates of parental Protectiveness confirm the hypothesis.

CHARACTERISTICS OF THE CHILD

A basic assumption of the theoretical formulations was that the peer acceptance of the child reflects the stimulus value of the child in the social situation. The measures of the characteristics of the child were postulated to represent major stimuli to which peers respond. Provided the measures are adequately constructed, the theoretical expectation is for a large proportion of significant correlations between the Characteristics of the Child and the Social Acceptance of the Child. These data support that expectation.

Further, the personality and social development of the child were postulated to be influenced by parental attitudes and child-rearing practices. Personal characteristics of the child and parental child-rearing attitudes and practices were expected to be influenced by factors in the family background. Evidence of these relationships will be discussed with respect to the several characteristics of the child.

Intelligence.--In its broad formulation, intelligence is conceptualized as the ability to solve complex problems, including problems of social, occupational, economic, and marital adjustment to life situations. To a degree, Social Level reflects this intellectual capacity, especially in the father. It is not surprising, therefore, that the child's IQ is highly correlated with Social Level (Tables 51 and 52), Economic Level, Father's Educational Level, and Mother's Educational Level (Table 53).

The moderate but significant pattern of correlations with child-rearing practices suggests that intelligent parents tend to have intelligent children and tend to employ enlightened practices in rearing their children (Tables 55 and 56).

The theoretical formulation that the attribute of intelligence operates as an asset in solving problems related to either emotional or social behavior was strongly supported by the evidence. As expected, high intelligence reinforces the child's learning experiences to the extent that it reflects a higher Self-Concept (Table 52, $r = .48$, $p < .01$) and more effective socialization. The association of intelligence with effective socialization was evidenced by the large proportion of socially acceptable behavioral measures (Tables 59 and 60) which were significantly correlated with IQ.

Seventeen of the 23 teacher rating trait measures were significantly associated with intelligence. The validity of the two measurement modes was supported by the magnitude of the coefficients: the highest correlate of IQ was Learns fast ($r = .68$, $p < .01$), the next highest Follows instructions easily ($r = .56$, $p < .01$), and the third highest Popular, generally liked ($r = .58$, $p < .01$), approximated the correlation of IQ with Peer Acceptance-Rejection.

Teachers, however, may be expected to emphasize intelligence, a concept generally valued by them. Conclusive unbiased evidence of the association of intelligence with socially effective characteristics was shown by the correlations of Class Play items (Table 60) with IQ; 13 of the 22 coefficients were significant.

The multivariate analyses (Table 62) indicated that 30 per cent of the variance of IQ was predictable from the two measures, Social Level and Family Tension, while only 16.8 per cent could be predicted by four measures of Parent Child-Rearing Practices. In combination the six variables predicted 37.6 per cent of the variance in IQ. Further analysis (Table 63) of the variance in IQ predictable from the six measures at these two levels indicated that 66 per cent of the predicted variance was uniquely related to Family Background (Social Level and Family Tension); 29 per cent was uniquely related to the four measures of child-rearing, and 5 per cent of the predicted variance was shared commonly with measures of the two levels. The data reflect the assumed association of the measure of Social Level and IQ with the intelligence of the parents, especially the father.

Self-Concept.--In theoretical formulations, this concept has its roots in parental attitudes of Loving-Rejecting. Due to the nature of the Self-Concept, the child's perception of parental behaviors is viewed as one of its more relevant correlates. It is argued that, if the child's perception of the parent is that of a rejecting one, then the veridical behavior of that parent is of no consequence. The evidence supports the theoretical formulation, Self-Concept was significantly associated with the child's perception of each parent ($r = .53$, $p < .01$) as loving (Table 55). Parental disagreement with respect to child-rearing practices was, as expected, significantly associated with Self-Concept ($r = -.28$, $p < .01$).

The association of this variable with the dimension of Casual-Demanding also supported the theoretical position, demanding and punishing parental practices were associated with a low Self-Concept (Table 56).

The correlations of Self-Concept with teacher's trait ratings (Table 59) provided evidence that negative self-concept of the child is accompanied by behaviors which teachers rate as suspicion (Trait 22), distrust (Trait 5), aggression (Trait 1), and social introversion (Traits 2, 18, 19 and 20). This evidence was confirmed by the correlates of Self-Concept with Class Play items (Table 60).

The multiple correlational analyses (Tables 62 and 63) indicated that only 16 per cent of the variance of Self-Concept was predicted from Family Background variables while 29.9 per cent was predicted from Parent Child-Rearing Practices. In combination, the variables at both levels predicted 34.2 per cent of the variance; of the total predicted variance, 18 per cent was uniquely predicted by the two Family Background variables, while 63 per cent was uniquely related to the four Parent Child-Rearing variables, and 19 per cent of the predicted variance was common to both variates. The fact that a major portion of the predicted variance of Self-Concept (72 per cent) was associated with the relatively small sample of the population of child-rearing practices is viewed as strong evidence that parental attitudes and child-rearing practices play a significant role in ego development.

Big Problems of the Child.--This measure was postulated to be closely allied with that of the measure of the Self-Concept, and was initially included in the study as an alternate measure of it. The results (Table 52) indicated a very high correlation between these two variables ($r = -.64$, $p < .01$). A comparable pattern of correlations was evidenced with respect to Loving-Rejecting (Table 55), Casual-Demanding (Table 56), and socially effective behaviors as rated by the teacher (Table 59) and as nominated by classmates for roles in the Class Play (Table 60).

Health Problems.--While the theoretical formulations concerning the pivotal linkages of the child's health with intelligence and ego development were supported, the expected associations with Parental Protectiveness were not manifested. The measure of Parental Protectiveness used may not have been a valid measure of that construct. Nevertheless, associations of Health Problems with parental Loving-Rejecting were highly significant, suggesting that psychosomatic disorders may be associated with parental rejecting. In order fully to explore the nature of the relations of Loving-Rejecting to the child's health, the items were correlated with three measures of Loving-Rejecting (Table 58). The significant negative correlations of Loving-Rejecting with such items as Born before expected, Poor health as a baby, Slowness in walking, Slowness in talking, and Slow-learner as a baby, indicated the child may have been rejected very early in life.

One significant relation, not expected by the hypothetical formulations, was that of a significant positive relation between the item Asthma, hay fever, and allergy with mother's self-report of Loving-Rejecting ($r = .22$, $p < .05$).

The measure of Health Problems, in addition to having significant correlations with Loving-Rejecting, was correlated with Family Background variables in such a manner as to indicate that low economic level and low parental education

(Table 53) were contributing factors of poor physical health.

As expected, the measure of the child's health was significantly associated with Self-Concept and with Big Problems. The comparison of these three measures across measures of Casual-Demanding (Table 56) and socially effective personality traits (Table 59 and 60) were remarkably consistent. The association of the teacher's rating of Generally good health with Health Problems ($r = -.30$, $p < .01$) was not unexpected.

The multiple correlational analysis indicated that 21.6 per cent of the variance of Health Problems was predicted by the two Family Background variables; 36 per cent was predicted by the four parental child-rearing attitudes and practices. The six variables predicted 40.2 per cent of the total variance. Of the predicted variance, 25 per cent was uniquely associated with family background factors, 59 per cent was uniquely associated with parental child-rearing practices, and 16 per cent was shared in common by variables from both levels.

Teacher Ratings of Personality Traits.--The two personality patterns selected to measure personality characteristics of the child as rated by the teacher, had highly significant correlations across measures of Family Background and Parent Child-Rearing Practices. The items which compose the two patterns formed linkages in the matrix of relationships in such a manner as to confirm the theoretical formulations relevant to socialization of the child (Table 59).

The multiple correlational analysis indicated that approximately equal portions of variance in Pattern A (12.9 per cent) and Pattern B (12.5 per cent) were predicted by the two measures of Family Background. A larger portion of the variance of Pattern B (19.9 per cent), defined as Superego Strength, than of Pattern A (13.7 per cent), Cattell's Sizothymia versus Affectothymia, was predicted by the variables drawn from the measures of Parent Child-Rearing Practices. Of the predicted variance of Pattern A (19.9 per cent) and Pattern B (23.4 per cent), 36 and 18 per cent, respectively, were uniquely associated with Family Background factors, while 41 and 53 per cent, respectively, were uniquely predicted by Parental Child-Rearing Attitudes and Practices. A larger proportion of the variance of these two characteristics, Patterns A and B, than any of the three other characteristics of the child examined in this manner, was in common with the measures at both levels, suggesting that such behaviors may have antecedents at both levels, but that the major influence is through the level of Parent Child-Rearing Attitudes and Practices.

Class Play Traits.--Examination of Table 60 indicated that, in general, the measures developed by this mode were suitable measures of the postulated behaviors. However, the four items selected as Pattern A (Neg.) were among the least predictive of the 21 items available. On the other hand, the items selected as measures of Pattern B (Neg.) were highly associated with the variables in the theoretical network.

Of interest, was the comparison of the two measures of peer relations, one averaged over four annual sociometric ratings, the other administered almost concurrently with the Class Play. The significantly higher level of average correlations (CR = 4.23, $p < .01$) suggested that the Class Play was especially sensitive to contemporary behaviors.

A further analysis of the Class Play (Table 61) indicated the highly stable nature of the LD (Like Most minus Like Least) sociometric measure. The pattern of multivariate correlations of negative traits with LL and of positive traits with LM varied systematically with age and sex, in these samples, suggesting a theoretical model of the socialization process. The negative behaviors declined in influence on LD, and the positive behaviors increased in influence on LD, with age. Neatly consistent with a model of socialization, the cross-over of the correlates of acceptance and rejection occurred a year earlier for girls. Of especial significance to this study is the evidence demonstrated that peers respond to the stimulus value of the child when voting in the sociometric situation.

SOCIAL ACCEPTANCE OF THE CHILD

Significant associations at each level of the network of relations were evidenced by the results. A major portion of the variance of Social Acceptance (68 per cent) was predicted by the measures at three levels (A) Family Background, (B) Parent Child-Rearing Practices, and (C) Characteristics of the Child (Table 64). In addition to the evidence presented above (Table 61) that responses of Like Most and Like Least are based on the stimulus value of the child, the evidence that measures of the Characteristics of the Child predicted 60 per cent of the variance of Social Acceptance supports that assumption.

The multiple partial correlations permitted the following analyses of the variance of Social Acceptance for the larger sample (N = 97): (1) About 9 per cent of the total variance was uniquely predicted by the Family Background variables; (2) 11 per cent of the total variance was predicted uniquely by Parent Child-Rearing Practices; (3) 45 per cent was uniquely predicted by Characteristics of the Child; (4) 21 per cent of the total was associated with the composite measures of Family Background and Parent Child-Rearing Practices directly, with the influence of the Characteristics of the Child partialed out; (5) 53 per cent of the total variance was associated directly with the composite measures of Family Background and Characteristics of the Child, when the influence of Parental Child-Rearing Practices was partialed out; 59 per cent of the total variance was directly related to the composite of measures of Parental Child-Relations and Characteristics of the Child, when the influence of Family Background was removed.

The decrease in the magnitude of predicted variance of measures at the Family Background Level from 23 to 9 per cent, with the removal of the common variance associated with Parent Child-Rearing Practices and Characteristics of the Child, demonstrated linkages in the network which indicated that the influences at the Family Background level are reflected, in part at least, by variables at the other two levels.

Similarly a reduction from 32 to 13 per cent with the removal of variance associated with the child's characteristics from that related to Parental Child-Rearing Practices, indicated that the stimulus characteristics of the child may be a reflection of parental attitudes and child-rearing practices.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

SUMMARY

The effects of several major factors on the personality development and the social acceptance of the child constituted the problem of this study. A network of background factors was hypothesized and strategically selected variables were employed to examine pivotal linkages. Multivariate methods were used in order to achieve control through statistical analysis. The results conformed to theoretical formulations as significant pivotal linkages were established throughout the hypothetical network of relationships, and evidence was provided which significantly identifies some of the factors which influence peer acceptance and rejection.

CONCLUSIONS

The hypothesis of significant interrelatedness among four categories of variables was confirmed.

Family Background

Social Level.--This factor in the family background is associated with enlightened child-rearing practices and attitudes, with psychologically favorable attributes and characteristics of the child, and with effective socialization of the child which culminates in social acceptance by his peers.

Family Tension.--This factor in the family background has a disrupting influence on the family, the child-rearing practices, and the child's personality development, and tends to elicit responses of rejection by the child's peers.

Parent Child-Rearing Practices and Attitudes

Loving-Rejecting.--In addition to linkages with the family background factors, above, measures of this dimension showed marked influence on the cognitive, physical, ego, and social development of the child.

Casual-Demanding.--This dimension demonstrated significant influence on the personality development and social acceptance in a manner analogous to that of Loving-Rejecting, except that fewer significant linkages with factors in the family background were manifested.

Protectiveness.--The results of this study indicated that the scale employed was measuring something somewhat different for different subjects; there was no area of agreement between scores based on parents' self-reports and scores based on the child's perception of that parent; the number of significant correlations with external criteria, although in the hypothesized direction, were only slightly better than chance expectancy.

Parental Consistency.--These results confirm that parental disagreement concerning child-rearing practices influences the child's personality development in a wide area, particularly that of ego development. The highly significant associations of parental disagreement with measures of tension in the family and low Social Level are noteworthy.

Characteristics of the Child

Intelligence.--The major portion of the predicted variance of IQ was associated with Social Level; only a moderate association was found with parental child-rearing practices and attitudes.

Ego Development.--This factor, measured by two instruments, was most significantly influenced by parental attitudes of Loving-Rejecting; low self-concept was associated with parental rejection. There was an appreciable association between the child's self-concept and teacher's ratings based on observed behaviors, and with peer acceptance-rejection.

Personality Traits.--The measures of personality traits predicted a major portion of the reliable variance of peer acceptance-rejection.

Social Acceptance.--The stimulus value of the child, in terms of his personality traits and characteristics, is the principal determinant of peer acceptance-rejection.

APPENDIX I

SUMMARY OF DATA COLLECTED

APPENDIX I

SUMMARY OF DATA COLLECTED

A. List of data forms and schedules by title, source of information, and number of cases.

I. Data collected from children in the sample

Title	Cases
Form 1. California Test of Mental Maturity	100
Form 2. SRA Junior Inventory	100
Form 3. Class Play (Adapted from Bower)	100
Form 4. How I Feel About Myself (Piers-Harris)	100
Form 5. Parent Child Relations Questionnaire: Child's Perception of Mother as Parent (Roe-Siegelman)	100
Form 6. Parent Child Relations Questionnaire: Child's Perception of Father as Parent (Roe-Siegelman)	99

II. Data collected by visit to the home, usually with mother

Form 7. Family Background Schedule	100
Form 8. Child's Medical History	100

III. Instruments administered to mothers

Form 9. Parent Child Relations Questionnaire (Adaptation of Roe-Siegelman PCR)	98

IV. Instruments administered to fathers

Form 10. Parent Child Relations Questionnaire (Adaptation of Roe-Siegelman PCR)	77

V. Data obtained from school records and interviews with school personnel

Form 11. School Forms	100
Form 12. Personality Rating by Teachers	100

VI. Data obtained from the files of the peer relations study

Form 13. Sociometric Ratings for each of four annual surveys 100

B. List of variables by form or schedule

Form 1. California Test of Mental Maturity (Two administrations to each child; tests taken two years apart)

1. Language IQ
2. Non-language IQ
3. Total Score IQ

Form 2. SRA Junior Inventory (The number of big, middle-sized, and little problems on each scale)

1. About Me and My School
2. About Me and My Home
3. About Myself
4. Getting along with Other People
5. Things in General
6. Sum of 1 to 5, above

Form 3. Class Play (Sociometric nominations on personality traits)

1. A kind, considerate friend
2. Someone who is often afraid and acts like a baby
3. Someone who often gets angry at little things and gets into many fights
4. Someone who is stuck-up and thinks he's better than everyone else
5. A nice, helpful mother (girls only)
6. A mean, cruel boss
7. A mean, bossy sister (girls only)
8. Someone who is fickle and often changes friends
9. Someone who is very smart and usually knows the answers
10. A bully who picks on smaller, weaker children
11. Someone whom everyone likes and who tries to help everyone
12. A hermit who doesn't like to be with people
13. A person with a very bad temper
14. A neighbor who is careless with other people's property
15. A neighbor who is careful of other people's property

16. The laxiest person in the world
17. A character who is a sloppy dresser--very careless about how he or she looks
18. Someone who is good natured and doesn't get angry over little things
19. A lawyer who likes to argue
20. A detective who is suspicious of everyone
21. Someone who is almost as stubborn as a mule
22. A suspicious character who is not trusted by the others
23. Someone to be class president

Form 4. How I Feel About Myself (Piers-Harris Self-Concept Questionnaire)

1. Intelligence
2. Behavior
3. Anxiety
4. Popularity
5. Appearance
6. Happiness
7. Total Score--Self-Concept

Form 5. Parent Child Relations Questionnaire: child's perception of mother as parent

1. Protecting
2. Symbolic-love punishment
3. Rejecting
4. Casual
5. Symbolic-love reward
6. Demanding
7. Direct-object punishment
8. Loving
9. Neglecting
10. Direct-object reward

Form 6. Parent Child Relations Questionnaire: child's perception of father as parent

1. Protecting
2. Symbolic-love punishment
3. Rejecting
4. Casual
5. Symbolic-love reward
6. Demanding
7. Direct-object punishment
8. Loving
9. Neglecting
10. Direct-object reward

Form 7. Family Background Schedule

1. Occupational level--father

2. Father's income--stanine
3. Years on the job--father
4. Mother employed
5. Value of the home
6. Grade completed--father
7. Grade completed--mother
8. Family size
9. Number of cars
10. Car age (newest car)
11.* Father regularly employed
12. Father's income--dollars
13. Total family income
14. Children at home--number
15. Car value
16. HS graduate--father
17. HS graduate--mother
18. Per capita income
19.* Mother baby sits
20.* Mother primary support of family (50% or more)
21.* Mother higher educated than father
22.* Mother less than 9th grade education
23.* History of serious illness in family
24.* Death in family
25.* Parent previously married (before this marriage)
26.* Parent separated or divorced (currently)
27.* Adopted child
28.* Unhappy marriage (mother's report)
29.* Large family (more than 3 children)
30.* Non-natural siblings
31.* Parent married more than twice
32.* No adult male living in the house
33.* History of psychiatric illness (family member)
34.* Discrepancy (-1σ) between father's educational level minus occupational level

*Indicates items used in Family Tension Scale

Form 8. Child's medical history

1. Born before expected
2. Pre-natal complications
3. Birth complications
4. Baby's health (poor)
5. Slow walking (over 13 mo.)
6. Slow talking (over 15 mo.)
7. Slow learner as a baby

8. Illness which may be associated with brain damage (serious accident, damage to head; a convulsion or fit; polio, meningitis, sleeping sickness, epilepsy, or cerebral palsy)
9. High fevers (104° or over)
10. Visual problem
11. Hearing problem
12. Speech problem
13. Wets the bed
14. Has been unconscious
15. Severely burned
16. Serious accident or injury
17. Asthma, hay fever, or allergy
18. Teeth need straightening
19. Bad dreams
20. Sleep walks
21. Afraid of dark
22. Child's present health (fair or poor)
23. Health bothers mother
24. Takes medicine regularly
25. Has been hospitalized
26. Health restricts play

Form 9 and 10. Parent Child Relations Questionnaire: Mother's and Father's self-reports

1. Protecting
2. Symbolic-love punishment
3. Rejecting
4. Casual
5. Symbolic-love reward
6. Demanding
7. Direct-object punishment
8. Loving
9. Neglecting
10. Direct-object reward

Form 11. School Form

1. Number of days absent from school because of the child's illness
2. Child's adjustment is at times a concern
3. Child is characteristically less attentive than others his age
4. Child almost constantly moving about, has fidgets, drops things, leaves his seat when he should not, finds reasons to be on the move
5. Child remains quiet long after the average child becomes restless
6. Below average athletic ability

Form 12. Personality Ratings by Teachers (23 bipolar traits adopted from Cattell)

1. Non-aggressive, kind, considerate vs. aggressive, tends towards fighting, bullying, teasing, cruelty
2. Unpopular, generally disliked by other children vs. popular, generally liked by other children
3. Poor general health, prone to absence by reason of illness, or physical complaints vs. of generally good health
4. Learns slowly vs. learns fast
5. Conscientious, trustworthy vs. untrustworthy, dishonest
6. Prefers not to be noticed vs. demanding of teacher's attention
7. Placid, free from distress vs. fearful, worrying, anxious
8. Calm, relaxed vs. over-active, excitable perhaps irritable
9. Cheerful vs. depressed
10. Responsible vs. irresponsible, frivolous
11. Quitting, fickle vs. persevering, determined
12. Practical-minded vs. imaginative
13. Neat, tidy, orderly vs. untidy, careless with respect to appearance of self, belongings
14. Adaptable, flexible vs. rigid, has difficulty adjusting to changes or new situations
15. Careful with property of others vs. careless, destructive of property of others
16. Lacking in artistic feeling vs. aesthetically sensitive, aesthetically fastidious
17. Has difficulty following instructions vs. follows instructions easily and accurately
18. Shy, bashful, seclusive, aloof, remains fairly isolated from other children vs. outgoing, mixes freely with other children
19. Associates mostly with children of opposite sex vs. associates mostly with children of own sex
20. Prefers solitary pursuits vs. gregarious, prefers games involving many children
21. Negativistic, stubborn, disobedient, argumentative vs. cooperative, compliant, obedient
22. Trustful of others, readily accepts solicitude of others as sincere vs. suspicious of others, ungrateful, rejects affection or solicitude.

23. Retiring, cautious vs. adventurous, bold, willing to take the chance of possible rejection or injury

Form 13. Sociometric Ratings
1. Like Most minus Like Least Z-score, year 1
2. Like Most minus Like Least Z-score, year 2
3. Like Most minus Like Least Z-score, year 3
4. Like Most minus Like Least Z-score, year 4
5. Average of 1 to 4, above

C. List of composite (reduced) variables by category

I. Family background: social, educational, and economic levels and family tension

1. Second-order factor scores:
   - Factor A: Economic level (Form 7, items 1, 2, 5, 12, 13, 18)
   - Factor F: Father's educational level (Form 7, items 6, 16)
   - Factor G: Mother's educational level (Form 7, items 7, 17)

2. Family Tension Scale (Form 7, items 11, 19 to 34)

II. Parental child-rearing attitudes and practices

1. Consensual loving-rejecting (second-order factor)

   - Factor A: Loving-rejecting (Mothers Form 9, scales 3, 8, 9)
   - Factor A: Loving-rejecting (Fathers Form 10, scales 3, 8, 9)
   - Factor A: Child's perception of mother as a loving-rejecting parent (Form 5, scales 3, 8, 9)
   - Factor A: Child's perception of father as a loving-rejecting parent (Form 6, scales 3, 8, 9)

2. Consensual casual-demanding (second-order factor)

   - Factor B: Casual-demanding (Mothers Form 9, scales 2, 4, 6, 7)
   - Factor B: Casual-demanding (Fathers Form 10, scales 2, 4, 6, 7)

Factor B: Child's perception of mother as a casual-demanding parent (Form 5, scales 2, 4, 6, 7)
Factor B: Child's perception of father as a casual-demanding parent (Form 6, scales 2, 4, 6, 7)

3. Maternal Protectiveness (Mother's Form 9, items 1, 5, 10)

4. Paternal Protectiveness (Father's Form 10, items 1, 5, 10)

5. Child's perception of maternal protectiveness (Form 5, items 1, 5, 10)

6. Child's perception of paternal protectiveness (Form 6, items 1, 5, 10)

III. Characteristics of the Child

1. Intelligence (Form 1, item 3, averaged over two tests)
2. Self-concept (Form 5, item 7)
3. Health and Physical Fitness (Form 8, items 1 to 26; Form 11, items 1, 6, 7, 8, 9, 13)
4. Number of Big Problems (Form 2, item 6)
5. Teacher Rating Pattern A (Sizothymia vs. Affectothymia) (Form 12, scales 1, 5, 14, 21, 22)
6. Teacher Rating Pattern B (Superego Strength) (Form 12, scales 10, 11, 13, 15)
7. Class Play Pattern B (Neg.) (Form 3, items 12, 14, 16, 17, 22)

IV. Peer relations variables

1. Like Most minus Like Least Z-scores averaged over four years (Form 16, item 5)

APPENDIX II

INSTRUMENTS AND QUESTIONNAIRES

TEXAS CHRISTIAN UNIVERSITY

INSTITUTE OF BEHAVIORAL RESEARCH

PEER RELATIONS STUDY

FORM 3. FAMILY BACKGROUND SCHEDULE

Indicate source of information if not mother.

I.D. Source Date

1. Father's occupation ______________________________
    Income source ____________________ Income amount __________
    Occupation history
        Father is ___ employed ___ unemployed
        How long has he had this job? __________
        Has employment been regular? ___ Yes ___ No
        If no, how frequently has he been unemployed __________
        Reason for unemployment ____________________
        ____
    Does father's work require him to be absent from home:
        ___ Yes ___ No
    If yes, indicate the nature of the absence. __________
    ____
    ____
    How long has family lived in this community? __________
    Estimate number of family moves in past 5 years __________
    Comment ______________________________
    ____
    Does a welfare or charitable organization supply
    ___ good ___ clothing ___ financial aid
    Comment ______________________________
    ____

2. Mother's occupation ______________________________
    Income source ________________ Income amount __________
    Hours worked/week _____ Hours away from home/week __________
    Primary support of family ___ Yes ___ No

3. Joint income ______________________________
    Source ____________________ Amount __________

4. Dwelling
    ___ House ___ Apt. ___ Duplex ___ Reside with relatives
    ___ Other, specify ______________________________

5. Home is ___ owned ___ rented ___ other payment/mo. __________
    Estimated market value ________________

6. Type car

Make	Model	Year	Due
____	____	____	____
____	____	____	____
____	____	____	____
____	____	____	____

7. Church affiliation:
Father ____________________
Mother ____________________
Child ____________________

8. Church attendance:	Child	Mother	Father
More than once a week	____	____	____
Once a week	____	____	____
Less than once a month	____	____	____
Never	____	____	____

9. Church participation:			
Attend Sunday School	____	____	____
Teaches Sunday School	____	____	____
Committee work	____	____	____
Other: ____________	____	____	____
None	____	____	____

10. Obtain a complete list of all organizations that each parent belongs to. List the organizations under father or mother respectively. Include in the list professional, civic, church, community, services, labor, social, political, welfare, or other organizations. Ask the parent which organizations that he actively participates in and indicate those by circling them. For example:

Father	Mother
Junior Chamber of Commerce	League of Women Voters
[✓ Rotary International]	[✓ Order of Eastern Star]

Father	Mother
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________
____________________	____________________

Father	Mother

11. Indicate the leisure-time activities for each parent and indicate how much time is spent per week on the activities.

Father

Activity	Hours/week

Mother

Activity	Hours/week

12. Parent's educational level:
Indicate highest grade completed:
Mother _____ Father _____

13. Bilingual home ___ Yes ___ No
Comment____
____

14. Has any family member (excluding subject) had a chronic or disabling illness or injury? ___ Yes ___ No
If yes, indicate which member and nature of illness or injury. ____
____

15. Is an invalid living with the family? ___ Yes ___ No
If so, what is the relationship to child?__________________

16. Has any member of the immediate family died? ___ Yes ___ No
If yes, indicate relationship to child, age, year of occurrence, and cause of death. __________________________
____
____

17. Marital relationship:
Does mother (respondent) consider the marriage to be a "happy" one? ___ Yes ___ No
If not, describe. ______________________________________
____
If both parents are living, indicate the parent relationship:
____ Living together
____ Separated, not divorced
____ Divorced, neither remarried
____ Divorced, mother remarried
____ Divorced, father remarried
Parent married more than twice: ___father ___mother
Is there an adult male in the family? ___ Yes ___ No
If other than father, explain. ___________________________
____

18. Child is cared for by:
____ Parents at home
____ Relatives
____ Guardian
____ Foster parents
____ Other, specify ___________________________________
____
____

19. Give age and sex by relationship of other children living in the home.

Siblings	Age	Sex	______ None
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
Half-siblings	______	______	______ None
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
Step-siblings	______	______	______ None
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
	______	______	
Adopted siblings	______	______	______ None
	______	______	
	______	______	
	______	______	
	______	______	

20. Psychiatric history:
Has any member of the family had a nervous breakdown or mental illness: ___ Yes ___ No ___ dnk
If yes, elaborate. ____
____
____
____
____

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PEER RELATIONS STUDY

FORM 1. MEDICAL HISTORY
Indicate source of information if not mother.

I.D. Source Date

---

1. Child's place of birth.
   City ________________________ State __________________

2. Was he (she) born in a hospital?
   ___ Yes ___ No ___ dnk (do not know)

3. How much did the baby weigh at birth? _____________ pounds

4. Was he (she) born
   ___ when expected ___ earlier ___ later ___ dnk

5. Was there anything unusual or anything wrong with the baby when he (she) was born?
   ___ Yes ___ No ___ dnk

6. Was he (she) a twin?
   ___ Yes ___ No ___ dnk
   If yes, indicate whether
   ___ fraternal ___ identical ___ dnk

7. While you (the mother) were pregnant with this child, did you have any medical problems or complications?
   ___ Yes ___ No ___ dnk
   If yes, what trouble did you have? ________________________
   ____

8. How many times had you (the mother) been pregnant before, including previous miscarriages as well as deliveries? _____

9. Before this baby was born, while you (the mother) were pregnant with this child, did you (the mother) see a doctor?
   ___ Yes ___ No ___ dnk

10. Did you (the mother) have any complications or trouble during the birth of this child?
___ Yes ___ No ___ dnk
If yes, what was the trouble? ______________________________
____

11. When he (she) was a baby, that is before he (she) was a year old, would you say he was in good, in fair, or in poor health?
___ good ___ fair ___ poor ___ dnk

12. Was there anything wrong with him (her) when he was a baby?
___ Yes ___ No ___ dnk
If yes, what was wrong? ______________________________
____
If yes, did you see a doctor about the baby's trouble?
___ Yes ___ No ___ dnk

13. Was the child breast fed?
___ Yes ___ No ___ dnk
If yes, how many months was the child breast fed? ________

14. Which of the following best describes how you weaned your child?
____ Child weaned self.
____ Trained to drink from cup before weaning; allowed to return to bottle or breast at will.
____ Trained to drink from cup but did not allow to return to bottle or breast at will; tried to get him (her) to change.
____ Withheld some feedings in spite of protests from child; allowed late bottles.
____ No late bottles; would not give in if child wanted to suck.

15. About how old was the child when he (she) first walked by himself? __________ months.

16. About how old was the child when he (she) spoke his first real word? __________ months.

17. Children learn to do things like eating by themselves and talking at different ages. Do you think this child was especially fast, about average, or slow in learning

to do things when compared with other children?
____ Faster than other children
____ About the same
____ Slower
____ dnk

18. Did he (she) go to kindergarten or nursery school before entering the first grade?
___ Yes ___ No ___ dnk

19. Now turning to the present time, how would you describe the child's health now?
___ very good ___ good ___ fair ___ poor
If poor, what is the trouble? ____________________
____

20. Is there anything about his (her) health which bothers or worries you?
___ Yes ___ No
If yes, what? ____________________
____

21. Does the child take any medicine regularly, not counting vitamins?
___ Yes ___ No
If yes, what is the medicine for? ____________________
____

22. At the present time does the child ever wet the bed?
___ Yes ___ No ___ dnk

23. Has he (she) ever been unconscious?
___ Yes ___ No ___ dnk

24. Has he (she) ever been burned so badly that it left a scar?
___ Yes ___ No ___ dnk

25. Has he (she) ever had any other serious accident or injury?
___ Yes ___ No ___ dnk

26. How about operations? Has he (she) had tonsils taken out?
___ Yes ___ No ___ dnk

27. Has he (she) had any other kind of operation?
___ Yes ___ No ___ dnk
If yes, what for and when? ______________________________
____

28. Has he (she) ever been in the hospital for any other sickness or trouble?
___ Yes ___ No ___ dnk
If yes, what? ______________________________
____

29. Here are some kinds of illnesses or conditions some children have. Has your child ever had?
- A. Asthma? ___ Yes ___ No ___ dnk
- B. Hay fever? ___ Yes ___ No ___ dnk
- C. Any other kinds of allergies ___ Yes ___ No ___ dnk
- D. Any trouble with his (her) kidneys? ___ Yes ___ No ___ dnk
- E. A heart murmur? ___ Yes ___ No ___ dnk
- F. Anything wrong with his (her) heart? ___ Yes ___ No ___ dnk
- G. A convulsion? ___ Yes ___ No ___ dnk
- H. A fit? ___ Yes ___ No ___ dnk

30. Here is a list of diseases that children sometimes have. Has this child ever had?
- A. Measles? __ Yes (Age ___) __ No __ dnk
- B. Mumps? __ Yes (Age ___) __ No __ dnk
- C. Chicken pox? __ Yes (Age ___) __ No __ dnk
- D. Scarlet fever? __ Yes (Age ___) __ No __ dnk
- E. Rheumatic fever? __ Yes (Age ___) __ No __ dnk
- F. Polio? __ Yes (Age ___) __ No __ dnk
- G. Diphtheria? __ Yes (Age ___) __ No __ dnk
- H. Meningitis or sleeping sickness? __ Yes (Age ___) __ No __ dnk
- I. Tuberculosis? __ Yes (Age ___) __ No __ dnk
- J. Diabetes (or sugar diabetes)? __ Yes (Age ___) __ No __ dnk
- K. Epilepsy? __ Yes (Age ___) __ No __ dnk
- L. Chorea or St. Vitus dance? __ Yes (Age ___) __ No __ dnk
- M. Cerebral palsy? __ Yes (Age ___) __ No __ dnk

N. Whooping cough? __ Yes (Age___) __ No __ dnk
O. Other __ Yes (Age___) __ No __ dnk
If other, write in. ____________________

31. Does your child often have bad sore throats?
___ Yes ___ No ___ dnk

32. Has your child ever run a high fever?
___ Yes ___ No ___ dnk
If yes, how high?
___ Not over 102° F. ___ 102° to 104° ___ 105° or over
If over 104° F., for how long a period?
___ Less than an hour ___ several hours ___ several days

33. Has this child ever had crossed eyes?
___ Yes ___ No ___ dnk

34. Has this child ever had an operation on his (her) eyes?
___ Yes ___ No ___ dnk

35. Does your child have any trouble hearing?
___ Yes ___ No ___ dnk

36. Does he (she) ever have earaches?
___ Yes ___ No ___ dnk

37. Has your child ever had any injury or damage to his (her) ears?
___ Yes ___ No ___ dnk
If yes, in what way was his (her) ear injured? ____________________
____

38. Has he (she) ever had his (her) ear drums opened or lanced?
___ Yes ___ No ___ dnk

39. Has he (she) ever had any other kind of operation on the ears?
___ Yes ___ No ___ dnk

40. Has this child ever had a running ear or any discharge from his ears (not counting wax in the ears)?
___ Yes ___ No ___ dnk

41. Is there any problem with the way he (she) talks?
___ Yes ___ No ___ dnk
If yes, what is the problem?
___ stammering or stuttering ___ lisping ___ hard to understand
If something else, what is that? ______________________
____

42. Does this child have a limp or any trouble when he (she) walks?
___ Yes ___ No

43. Has the child's health ever kept him (her) from hard exercise or play?
___ Yes ___ No ___ dnk

44. Has this child ever had his (her) teeth straightened or had bands on his teeth?
___ Yes ___ No ___ dnk
If no, do you think the child's teeth need straightening?
___ Yes ___ No

45. About what time does he (she) usually go to bed on nights when next day is a school day?
_____ P.M. _____ no usual time

46. Does he (she) have bad (unpleasant) dreams or nightmares?
___ Yes, frequently ___ Yes, but not often
___ Never ___ dnk

47. Does he (she) walk in his (her) sleep?
___ Yes, frequently ___ Yes, but not often
___ Never ___ dnk

48. Sleeps alone in separate room? ___ Yes ___ No
If no, sleeps in a separate bed with the room shared by another person? ___ Yes ___ No (If yes, who? ______________________)
Shares bed with another person? ___ Yes ___ No (If yes, who? ______________________)

49. Is he (she) afraid to be left alone in the dark?
___ Yes ___ No

50. FOR GIRLS ONLY

Have her monthly periods started?

___ Yes ___ No ___ dnk

If yes, how old was she when they started?

_____ years _____ months

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PEER RELATIONS STUDY

FORM 5

PCR*--Mothers

I.D. Source Date

In this folder are a number of statements which describe different ways that mothers act toward their children. Read each statement carefully and think how well it describes how your mother acted while you were growing up. Think especially about the time before you were 12.

Before each statement there are four lines. These are labeled VERY TRUE, PERHAPS TRUE, PERHAPS UNTRUE, VERY UNTRUE. Put an X on the line that indicates how exact you think each statement was of your mother. If none of these descriptions seems quite right, you may put the X between two of the lines.

For example, if your memory is that your mother always objected if you were late for meals, you would mark the item as follows:

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
X	___	___	___	1. objected when I was late for meals.

---

*Revised with permission from Dr. Anne Roe.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	1. tried to get me everything I wanted.
____	____	____	____	2. complained about me to others when I did not listen to her.
____	____	____	____	3. made no excuses for my age.
____	____	____	____	4. let me spend my allowance any way I liked.
____	____	____	____	5. discussed what was good about my behavior and helped to make clear the good effects of my actions.
____	____	____	____	6. punished me hard enough when I misbehaved to make sure I wouldn't do it again.
____	____	____	____	7. took away my toys or playthings when I was bad.
____	____	____	____	8. was really interested in my affairs.
____	____	____	____	9. kept forgetting things she was supposed to do for me.
____	____	____	____	10. took me places (trips, shows, etc.) as a reward.
____	____	____	____	11. spoiled me.
____	____	____	____	12. made me feel ashamed or guilty when I misbehaved.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
___	___	___	___	13. let me know I wasn't wanted.
___	___	___	___	14. set very few rules for me.
___	___	___	___	15. compared me favorably with other children when I did well.
___	___	___	___	16. made it clear that she was boss.
___	___	___	___	17. slapped or struck me for my bad manners.
___	___	___	___	18. made me feel wanted and needed.
___	___	___	___	19. was too busy to answer my questions.
___	___	___	___	20. relaxed rules and regulations as a reward.
___	___	___	___	21. was very careful about protecting me from accidents.
___	___	___	___	22. nagged or scolded me when I was bad.
___	___	___	___	23. thought it was my own fault if I got into trouble.
___	___	___	___	24. let me dress in any way I pleased.
___	___	___	___	25. told me how proud she was of me when I was good.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	26. thought I should always be doing something.
____	____	____	____	27. took away or reduced my allowance as punishment.
____	____	____	____	28. made me feel what I did was important.
____	____	____	____	29. did not care if I got into trouble.
____	____	____	____	30. gave me new books or records as rewards.
____	____	____	____	31. couldn't bring herself to punish me.
____	____	____	____	32. punished me by not looking at me or talking to me.
____	____	____	____	33. did not spend any more time with me than she had to.
____	____	____	____	34. let me off easy when I did something wrong.
____	____	____	____	35. treated me more like a grown-up when I behaved well.
____	____	____	____	36. pushed me to be better than others in everything I did.
____	____	____	____	37. wouldn't let me play with other children when I was bad.
____	____	____	____	38. encouraged me to do things on my own.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	39. paid no attention to what I was doing in school.
____	____	____	____	40. let me stay up longer as a reward.
____	____	____	____	41. protected me from teasing or pushing around by other children.
____	____	____	____	42. made me feel I wasn't loved any more if I misbehaved.
____	____	____	____	43. did not want me to bring friends home.
____	____	____	____	44. gave me the choice of what to do whenever it was possible.
____	____	____	____	45. praised me before my playmates.
____	____	____	____	46. told me how to spend my free time.
____	____	____	____	47. spanked or whipped me as punishment.
____	____	____	____	48. talked to me in a warm and affectionate way.
____	____	____	____	49. did not take me into consideration in making plans.
____	____	____	____	50. rewarded me by letting me off some of my regular chores.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	51. did not want me to play rough outdoor games for fear I might be hurt.
____	____	____	____	52. shamed me before my playmates when I misbehaved.
____	____	____	____	53. disapproved of my friends.
____	____	____	____	54. let me eat what I wanted to.
____	____	____	____	55. expressed greater love for me when I was good.
____	____	____	____	56. punished me without any thought or hesitation when I misbehaved.
____	____	____	____	57. gave me extra chores as punishment.
____	____	____	____	58. tried to help me when I was scared or upset.
____	____	____	____	59. did not care whether I got the right kind of food.
____	____	____	____	60. gave me candy or ice cream or fixed my favorite foods for me as a reward.
____	____	____	____	61. taught me not to fight under any circumstances.
____	____	____	____	62. frightened or threatened me when I did wrong.
____	____	____	____	63. went out of the way to hurt my feelings.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
___	___	___	___	64. let me do as I liked with my time after school.
___	___	___	___	65. gave me special attention as a reward.
___	___	___	___	66. demanded unquestioning respect and regard for her wishes.
___	___	___	___	67. punished me by sending me out of the room or to bed.
___	___	___	___	68. did not try to tell me everything but encouraged me to find things out for myself.
___	___	___	___	69. left my care to someone else (for example, nurse or relative).
___	___	___	___	70. let me go to parties or play with others more than usual as a reward.
___	___	___	___	71. taught me to go for help to my parents or teacher rather than to fight.
___	___	___	___	72. told me how ashamed she was when I misbehaved.
___	___	___	___	73. sneered and made fun of me.
___	___	___	___	74. let me choose my own friends.
___	___	___	___	75. praised me when I deserved it.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	76. always told me exactly how to do my work.
____	____	____	____	77. took away my books or records as punishment.
____	____	____	____	78. respected my point of view and encouraged me to express it.
____	____	____	____	79. acted as if I didn't exist.
____	____	____	____	80. rewarded me by giving me money or increasing my allowance.
____	____	____	____	81. preferred to have me play at home rather than to visit other children.
____	____	____	____	82. compared me with other children when I misbehaved.
____	____	____	____	83. complained about me.
____	____	____	____	84. let me work by myself.
____	____	____	____	85. made me feel proud when I did well.
____	____	____	____	86. pushed me to do well in school.
____	____	____	____	87. punished me by being more strict about rules and regulations.
____	____	____	____	88. let me do things I thought were important, even if it were troublesome for her.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	89. paid no attention to me.
____	____	____	____	90. hugged me, kissed me, patted me on the head when I was good.
____	____	____	____	91. didn't let me go places because something might happen to me.
____	____	____	____	92. reasoned with me and explained possible harmful results when I did wrong things.
____	____	____	____	93. compared me to other children no matter what I did.
____	____	____	____	94. did not object to my loafing or daydreaming.
____	____	____	____	95. praised me to others.
____	____	____	____	96. would not let me question her thinking.
____	____	____	____	97. punished me by not taking me on trips or visits that I had been promised.
____	____	____	____	98. tried to help me learn to be satisfied with myself.
____	____	____	____	99. ignored me as long as I did not do anything to bother her.
____	____	____	____	100. gave me new things as a reward, such as toys.
____	____	____	____	101. hated to refuse me anything.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	102. thought it was bad for a child to be given affection and tenderness.
____	____	____	____	103. did not tell me what time to be home when I went out.
____	____	____	____	104. wanted to have complete control over my actions.
____	____	____	____	105. was willing to discuss regulations with me and took my point of view into consideration in making them.
____	____	____	____	106. did not care who my friends were.
____	____	____	____	107. worried about me when I was away.
____	____	____	____	108. did not want me around at all when she had company.
____	____	____	____	109. did not object when I was late for meals.
____	____	____	____	110. taught me that she knew best and that I must accept her decisions.
____	____	____	____	111. encouraged me to bring friends home and tried to make things pleasant for them.
____	____	____	____	112. left me alone when I was upset.

VERY TRUE	PERHAPS TRUE	PERHAPS UNTRUE	VERY UNTRUE	My mother
____	____	____	____	113. would not let me try things if there were any chance I would fail.
____	____	____	____	114. expected children to misbehave if they were not watched.
____	____	____	____	115. was easy with me.
____	____	____	____	116. expected prompt obedience without question.
____	____	____	____	117. taught me skills I wanted to learn.
____	____	____	____	118. did not try to help me learn things.
____	____	____	____	119. wanted to know all about all my experiences.
____	____	____	____	120. believed a child should be seen and not heard.
____	____	____	____	121. did not bother much about making me obey rules.
____	____	____	____	122. kept the house in order by having a lot of rules and regulations for me.
____	____	____	____	123. made it easy for me to tell her things.
____	____	____	____	124. forgot my birthday.

TEXAS CHRISTIAN UNIVERSITY
INSTITUTE OF BEHAVIORAL RESEARCH
PEER RELATIONS STUDY

FORM 4*

The Way I Feel About Myself

Name Teacher Date

Here are a set of statements. Some of them are true of you and so you will circle the YES. Some are not true of you and so you will circle the NO. Answer every question even if some are hard to decide. There are no right or wrong answers. Only you can tell us how you feel about yourself, so we hope you will mark the way you really feel inside.

1. My classmates make fun of me YES NO
2. I am a happy person YES NO
3. It is hard for me to make friends YES NO
4. I am often sad YES NO
5. I am smart YES NO
6. I am shy YES NO
7. I get nervous when the teacher calls on me YES NO
8. My looks bother me YES NO
9. When I grow up I will be an important person YES NO
10. I get worried when we have tests in school YES NO
11. I am unpopular YES NO
12. I am well behaved in school YES NO
13. It is usually my fault when something goes wrong YES NO
14. I cause trouble to my family YES NO
15. I am strong YES NO
16. I have good ideas YES NO
17. I am an important member of my family YES NO

---

*Reproduced with permission of Drs. Ellen V. Piers and Dale B. Harris.

18. I like being the way I am YES NO

19. I am good at making things with my hands YES NO

20. I give up easily YES NO

21. I am good in my schoolwork YES NO

22. I do many bad things YES NO

23. I can draw well YES NO

24. I am good in music YES NO

25. I behave badly at home YES NO

26. I am slow in finishing my schoolwork YES NO

27. I am an important member of my class YES NO

28. I am nervous YES NO

29. I have pretty eyes YES NO

30. I can give a good report in front of the class YES NO

31. In school I am a dreamer YES NO

32. I pick on my brother(s) and sister(s) YES NO

33. My friends like my ideas YES NO

34. I often get into trouble YES NO

35. I am disobedient at home YES NO

36. I am unlucky YES NO

37. I worry a lot YES NO

38. My parents expect too much of me YES NO

39. I usually want my own way YES NO

40. I feel left out of things YES NO

41. I have nice hair YES NO

42. I often volunteer in school YES NO

43. I have a pleasant face YES NO

44. I sleep well at night YES NO

45. I hate school YES NO

46. I am among the last to be chosen for games YES NO

47. I am sick a lot YES NO

48. I am often mean to other people YES NO

49. My classmates in school think I have good ideas YES NO

50. I am unhappy YES NO

51. I have many friends YES NO

52. I am cheerful YES NO

53. I am dumb about most things YES NO

54. I am goodlooking YES NO

55. I have lots of pep YES NO

56. I get into a lot of fights YES NO

57. I am popular with boys YES NO

58. People pick on me YES NO

59. My family is disappointed in me YES NO

60. I wish I were different YES NO

61. When I try to make something, everything seems to go wrong YES NO

62. I am picked on at home YES NO

63. I am a leader in games and sports YES NO

64. I am clumsy YES NO

65. In games and sports I watch instead of play YES NO

66. I forget what I learn YES NO

67. I am easy to get along with YES NO

68. I lose my temper easily YES NO

69. I am popular with girls YES NO

70. I am a good reader YES NO

71. I would rather work alone than with a group YES NO

72. I dislike my brother (sister) YES NO

73. I have a bad figure YES NO

74. I am often afraid YES NO

75. I am always dropping or breaking things YES NO

76. I cry easily YES NO

77. I am different from other people YES NO

78. I think bad thoughts YES NO

79. I can be trusted YES NO

80. I am a good person YES NO

INSTRUCTIONS TO TEACHERS FOR PUPIL PERSONALITY TRAIT DESCRIPTIONS

Materials

The envelope you received contains 24 class lists, each list referring to a separate personality trait. Beneath each trait is listed a roster of your pupils and a scale along which each pupil is to be judged.

Description of Personality Trait Scales

At the top of each class is printed a personality trait. Each trait is represented along a continuous scale with two extremes and a neutral middle, as in the following example:

Learns Slowly	Extreme	Moderate	Slight	Middle	Slight	Moderate	Extreme	Learns Fast
	1	2	3	4	5	6	7	

Each scale is divided into seven intervals with the intervals "1" and "7" corresponding to the extremes of the trait, intervals "4" corresponding to the middle or neutral part of the scale, and the other intervals to intermediate points as shown.

The numbers to the right of each pupil's name represent the seven intervals of the scale. The procedure for rating is given below.

Importance of Objectivity in the Trait Descriptions

In estimating a pupil's position on the trait scales it is most important to be objective. In each case, consider only the specific trait being judged.

One difficulty repeatedly encountered in this type of judgments is called "halo effect." This is the tendency of persons to use their general overall impression of an individual's behavior in judging a particular trait, rather than basing their judgment on the trait itself. The "halo effect" results in severe contamination in the accuracy of judgments and is thereby extremely important to avoid. By strictly adhering to the procedures listed below, you will effectively eliminate "halo effect."

Procedure

Complete each trait scale before you do another. Indicate the position you believe each pupil occupies on the scale by circling the corresponding number following the pupil's name. Be sure to judge every child on every trait even if you are not certain in every case. Most teachers are better judges of their pupils than they may realize. However, if you believe you are unable to rate one or more children on any of the traits, cross out the name(s) and do the remainder.

Do not use your estimates of traits already judged as a guide in estimating other traits; that is, judge each trait independently. Do not attempt to present consistent pictures of pupils on these traits. There is no certain evidence as to how they are related.

Base your judgment for each trait on behavior you have observed. Discount rumors and other second-hand information of a pupil's behavior.

Avoid evaluation of the traits themselves. The traits are personality dimensions along which behavior may be observed. They are not intended as measures of "good" or "bad" and evaluation of them as such is for the most part meaningless.

It is not necessary that you complete all 24 traits at one sitting. However, as noted above, once you have finished judging a trait, set the list aside and do not refer to it in estimating later traits.

3/11/65

TEXAS CHRISTIAN UNIVERSITY

INSTITUTE OF BEHAVIORAL RESEARCH

PEER RELATIONS STUDY

FORM 7

Peer Relations

Name

Date

Suppose that your class is going to put on a play and you are selected to pick the cast. Below you will find a list of some of the parts in this play. Your job is to pick a boy or a girl in your class for each of the parts. Your play will be most successful and a lot of fun if you pick the boy or girl who you think would most naturally fit the part. Since many of the parts listed are small ones, you may, if you wish, select the same boy or girl for more than one part. Do not choose yourself for any of the parts.

Make your choices carefully. If you have any questions about the meaning of a word or anything else, be sure to ask your teacher.

****

Write on the line opposite each part the name of the boy or girl you select to play the part. You may choose more than one person for a part if you wish.

Description of the Part	Your Nomination
1. A kind, considerate friend.	________________
2. Someone who is often afraid and acts like a baby.	________________
3. Someone who often gets angry at little things and gets into many fights.	________________
4. Someone who is stuck up and thinks he's better than everyone else.	________________

	Description of the Part	Your Nomination
5.	A nice, helpful mother.	
6.	A mean, cruel boss.	
7.	A mean, bossy sister.	
8.	Someone who is fickle and often changes friends.	
9.	Someone who is very smart and usually knows the answers.	
10.	A bully who picks on smaller, weaker children.	
11.	Someone whom everyone likes and who tries to help everyone.	
12.	A hermit who doesn't like to be with people.	
13.	A person with a very bad temper.	
14.	A neighbor who is careless with other people's property.	
15.	A neighbor who is careful of other people's property.	
16.	The laxiest person in the world.	
17.	A character who is a sloppy dresser--very careless about how he or she looks.	
18.	Someone who is good natured and doesn't get angry over little things.	
19.	A lawyer who likes to argue.	
20.	A detective who is suspicious of everyone.	

	Description of the Part	Your Normination
21.	Someone who is almost as stubborn as a mule.	
22.	A suspicious character who is not trusted by the others.	
23.	Someone to be class president.	

APPENDIX III

CORRELATIONAL AND FACTOR MATRICES

Table 1

Intercorrelations of 18 Measures of Social Level for 100 Families

Variable	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Father's Occupational Level	78	12	-04	60	66	42	-31	19	-29	33	71	65	-21	28	51	40	59
2. Father's Income Stanine		32	-14	60	52	35	-28	21	-38	41	92	76	-17	40	42	40	64
3. Years Emplyed--Father			-06	13	-03	-03	-17	08	-14	35	29	23	-18	13	14	07	24
4. Mother Employed				-11	10	21	-30	07	03	-17	-12	28	-32	-04	12	12	32
5. Market Value of the Home					42	42	-18	35	-35	25	59	57	-09	48	37	31	50
6. Grade Completed--Father						60	-31	14	-23	09	52	51	-21	20	67	49	49
7. Grade Completed--Mother							-41	29	-32	-01	34	52	-34	25	41	71	52
8. Family Size--Number								-11	24	-18	-23	-34	87	-18	-22	-41	-56
9. Number of Cars									-36	-07	16	25	-11	35	24	12	22
10. Age of Newest Car										-25	-31	-28	20	-88	-20	-14	-23
11. Father Regularly Employed											32	18	-08	23	04	03	17
12. Father's Income--Dollars												84	-13	38	37	39	68
13. Total Family Income													-28	33	40	45	86
14. Children at Home--Number														-16	-14	-38	-57
15. Value of Newest Car															17	14	26
16. HS Graduate--Father																40	37
17. HS Graduate--Mother																	50
18. Family Income Per Capita																	

Decimals omitted; $r \geq .20$, $p < .05$; $r \geq .25$, $p < .01$.

Table 2

Intercorrelations of Items of the Family Tension Scale (N = 100)

Items*	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Mother baby sits	-08	-18	30	06	-04	-08	-09	-08	-06	06	13	-08	-04	-05	07	21
2. Mother primary support		29	-13	39	16	08	-13	33	30	29	-16	08	14	54	20	20
3. Mother better educated			-08	09	11	15	00	08	19	09	-02	22	10	10	-01	12
4. Mother low education				12	07	29	27	-04	-11	-06	39	03	10	-09	23	04
5. Father not regularly employed					32	24	13	-02	14	05	13	24	12	06	36	26
6. Serious illness						11	22	-06	09	-02	18	-02	-11	06	35	35
7. Death							13	-12	02	-14	20	24	-06	-08	26	17
8. Previous marriage								07	13	04	11	41	28	-09	05	05
9. Separated or divorced									17	59	-16	29	53	38	-01	-01
10. Child-subject adopted										26	-19	38	-05	30	03	15
11. Unhappy marriage											-19	05	30	48	-03	17
12. Large family												00	00	-16	03	09
13. Mixed siblings													30	-08	-03	-03
14. Multiple marriages														-04	-06	06
15. No adult male															21	21
16. Psychiatric history																09
17. Underachieving father																

*Only brief item descriptions are given here, see Form 7 Appendix I and text.

Decimals omitted; $r \geq .20$, $p < .05$; $r \geq .25$, $p < .01$.

Table 3

The Roe-Siegelman PCR Questionnaire Boys' Perception of Fathers as Parents Matrix of Intercorrelations of Scales (N = 51)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	08	-11	13	48	06	12	35	-26	62
2. Punishing S-L		59	-15	05	44	45	-29	46	09
3. Rejecting			-19	-35	43	51	-62	71	-04
4. Casual				-01	-20	-09	00	09	29
5. Rewarding S-L					24	66	-45	38	00
6. Demanding						56	-11	26	09
7. Punishing D-O							-21	44	27
8. Loving								-76	27
9. Neglecting									25
10. Rewarding D-O									

Decimals omitted.

Table 4

The Roe-Siegelman PCR Questionnairs Girls' Perception of Fathers as Parents Matrix of Intercorrelations of Scales
(N = 48)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	-09	-22	13	59	08	05	48	-46	50
2. Punishing S-L		55	-15	-07	58	64	-08	36	-06
3. Rejecting			-10	-23	43	52	-47	61	-12
4. Casual				-13	-20	-41	05	00	04
5. Rewarding S-L					10	15	44	-35	62
6. Demanding						58	01	19	04
7. Punishing D-O							-10	29	24
8. Loving								-66	36
9. Neglecting									-29
10. Rewarding D-O									

Decimals omitted.

Table 5

The Roe-Siegelman PCR Questionnaire Boys' Perception of Mothers as Parents Matrix of Intercorrelations of Scales
(N = 51)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	32	16	21	32	39	23	16	-01	33
2. Punishing S-L		55	-10	10	51	38	-03	29	03
3. Rejecting			-12	-21	54	39	-47	61	-08
4. Casual				28	-02	08	17	02	38
5. Rewarding S-L					17	18	54	-16	63
6. Demanding						54	08	23	14
7. Punishing D-O							-06	33	28
8. Loving								-56	44
9. Neglecting									-18
10. Rewarding D-O									

Decimals omitted.

Table 6

The Roe-Siegelman PCR Questionnaire Girls'
Perception of Mothers as Parents Matrix
of Intercorrelations of Scales
(N = 48)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	08	-21	15	56	27	13	63	-23	58
2. Punishing S-L		40	-18	-05	53	57	-24	28	-14
3. Rejecting			-35	-38	52	46	-62	80	-40
4. Casual				26	-21	-44	22	-26	19
5. Rewarding S-L					07	09	69	-35	69
6. Demanding						59	-02	37	-08
7. Punishing D-O							-03	23	08
8. Loving								-74	63
9. Neglecting									-40
10. Rewarding D-O									

Decimals omitted.

Table 7

The Roe-Siegelman PCR Questionnaire Fathers' Self-Reports of Boy-Rearing Practices Matrix of Intercorrelations of Scales (N = 43)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	28	32	29	25	21	29	-26	34	56
2. Punishing S-L		68	08	16	48	60	-38	46	25
3. Rejecting			12	-02	40	47	-63	63	17
4. Casual				00	08	03	-20	30	52
5. Rewarding S-L					46	10	40	-18	41
6. Demanding						40	-12	31	30
7. Punishing D-O							-44	46	38
8. Loving								-71	-03
9. Neglecting									29
10. Rewarding D-O									

Decimals omitted.

Table 8

The Roe-Siegelman PCR Questionnaire Fathers' Self-Reports of Girl-Rearing Practices Matrix of Intercorrelations of Scales (N = 34)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	22	36	54	06	44	11	-07	03	32
2. Punishing S-L		33	-04	44	43	72	05	-05	38
3. Rejecting			43	-21	02	09	-42	52	14
4. Casual				01	-08	-21	-23	23	37
5. Rewarding S-L					39	54	64	-47	56
6. Demanding						63	32	-16	19
7. Punishing D-O							30	-12	34
8. Loving								-74	16
9. Neglecting									30
10. Rewarding D-O									

Decimals omitted.

Table 9

The Roe-Siegelman PCR Questionnaire Mothers' Self-Reports of Boy-Rearing Practices Matrix of Intercorrelations of Scales (N = 51)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	43	24	24	32	47	38	-04	17	48
2. Punishing S-L		53	22	47	60	50	-12	13	43
3. Rejecting			26	26	48	36	-41	57	43
4. Casual				06	02	-11	-28	34	-08
5. Rewarding S-L					41	50	39	02	44
6. Demanding						56	-11	23	53
7. Punishing D-O							08	23	57
8. Loving								-56	-09
9. Neglecting									41
10. Rewarding D-O									

Decimals omitted.

Table 10

The Roe-Siegelman PCR Questionnaire Mothers'
Self-Reports of Girl-Rearing Practices
Matrix of Intercorrelations
of Scales (N = 48)

Scales	2	3	4	5	6	7	8	9	10
1. Protecting	-02	-15	34	17	09	-01	24	-17	27
2. Punishing S-L		41	10	08	37	49	-16	43	05
3. Rejecting			-20	-28	41	51	-70	82	-05
4. Casual				33	-24	-14	40	-19	37
5. Rewarding S-L					23	20	57	-42	65
6. Demanding						63	-24	40	17
7. Punishing D-O							-23	45	28
8. Loving								-79	35
9. Neglecting									-17
10. Rewarding D-O									

Decimals omitted.

Table 11

Unrotated Powered Vector Factor Analysis Boys' Perception of Fathers as Parent (N = 99)

Scales	Factor Loadings						Communalities
	A	B	C	D	E	F	
	LR	CD	Q	Unidentified Factors			
1. Protecting	38	-39	35	46	10	56	97
2. Punishing S-L	-40	-53	-14	18	57	-14	83
3. Rejecting	-79	-35	-14	20	13	05	82
4. Casual	02	08	84	-48	17	13	99
5. Rewarding S-L	72	-46	-01	03	35	05	85
6. Demanding	-18	-82	-29	-25	06	-03	85
7. Punishing D-O	-36	-79	02	-02	-36	05	89
8. Loving	91	-10	-01	01	-04	-05	84
9. Neglecting	-91	-18	14	-02	11	03	88
10. Rewarding D-O	25	-49	68	43	-06	-19	99
Per cent of variance	33.2	23.4	14.3	7.8	6.5	3.9	89.2

Table 12

Unrotated Powered Vector Factor Analysis Girls' Perception of Fathers as Parent (N = 100)

Scales	Factor Loadings					
	A LR	B CD	C O	D	E	Commu-nalities
1. Protecting	21	07	76	28	-31	80
2. Punishing S-L	22	-87	-05	13	16	85
3. Rejecting	-26	-75	-24	23	-22	78
4. Casual	10	27	-02	74	09	64
5. Rewarding S-L	-13	02	88	-12	07	82
6. Demanding	23	-77	11	05	04	67
7. Punishing D-O	-11	-86	20	-35	-07	92
8. Loving	50	20	57	-05	51	88
9. Neglecting	-68	-47	-47	26	13	98
10. Rewarding D-O	-17	-03	86	03	01	77
Per cent of variance	9.9	29.9	27.5	9.1	4.7	81.2

Table 13

Unrotated Powered Vector Factor Analysis Boys' Perception of Mothers as Parents (N = 100)

	Factor Loadings							
Scales	A	B	C	D	E	F	G	Communalities
	LR	CD	O					
1. Protecting	-04	-44	45	32	05	49	13	76
2. Punishing S-L	-43	-67	12	27	-03	-42	-02	89
3. Rejecting	-87	-25	07	14	02	-04	-21	89
4. Casual	10	27	77	05	-55	-03	07	99
5. Rewarding S-L	31	-23	62	01	38	-09	49	93
6. Demanding	-36	-75	22	10	-07	25	-07	82
7. Punishing D-O	-40	-52	35	-66	-05	06	00	99
8. Loving	75	-41	26	04	04	-22	07	85
9. Neglecting	-88	12	09	-05	04	-12	27	88
10. Rewarding D-O	24	-09	82	-09	42	-04	-26	99
Per cent of variance	27.2	18.4	21.3	6.6	6.5	5.6	4.6	90.1

Table 14

Unrotated Powered Vector Factor Analysis Girls' Perception of Mothers as Parent (N = 100)

Scales	Factor Loadings							Commu-nalities
	A	B	C	D	E	F	G	
	LR	CD	O					
1. Protecting	38	-26	73	-02	21	-06	-44	98
2. Punishing S-L	-37	-48	07	58	11	-52	00	99
3. Rejecting	-91	-19	13	-04	04	04	03	89
4. Casual	33	36	22	66	-09	52	-04	99
5. Rewarding S-L	54	-26	61	03	-08	06	38	88
6. Demanding	-39	-51	43	08	43	-02	14	80
7. Punishing D-O	-30	-95	00	01	-01	01	00	99
8. Loving	85	-24	32	-10	15	05	07	93
9. Neglecting	-93	05	21	-05	-04	04	03	92
10. Rewarding D-O	55	-26	55	-09	-56	-02	-05	99
Per cent of variance	36.3	18.3	15.9	8.0	5.9	5.5	3.7	94.0

Table 15

Unrotated Powered Vector Factor Analysis Fathers' Self-Reports of Boy-Rearing Practices (N = 43)

Scales	Factor Loadings						Communalities
	A	B	C	D	E	F	
	LR	CD	O	Unidentified Factors			
1. Protecting	-37	26	41	33	-18	49	76
2. Punishing S-L	-66	-20	32	04	34	-16	72
3. Rejecting	-86	-15	10	03	-20	-03	81
4. Casual	-24	86	16	-26	-09	-21	95
5. Rewarding S-L	19	-13	88	25	-17	-25	98
6. Demanding	-37	-27	73	-50	01	08	99
7. Punishing D-O	-60	-11	28	14	60	-01	84
8. Loving	80	-03	28	02	-01	-20	76
9. Neglecting	-92	11	-01	-02	-07	-05	86
10. Rewarding D-O	-26	60	64	24	17	17	95
Per cent of variance	34.6	13.5	21.8	5.8	6.1	4.5	86.3

Table 16

Unrotated Powered Vector Factor Analysis Fathers' Self-Reports of Girl-Rearing Practices (N = 34)

Scales	Factor Loadings						Communalities
	A	B	C	D	E	F	
	LR	CD	O	Unidentified Factors			
1. Protecting	-11	-29	78	47	-03	-14	94
2. Punishing S-L	05	-92	-05	-09	01	-26	93
3. Rejecting	-61	-39	26	-03	62	-01	98
4. Casual	-30	00	85	-16	07	02	85
5. Rewarding S-L	69	-46	19	-24	-07	29	87
6. Demanding	30	-58	11	64	-08	23	90
7. Punishing D-O	29	-88	-16	06	-04	14	91
8. Loving	96	-03	05	04	25	07	99
9. Neglecting	-84	-07	-04	-01	04	44	92
10. Rewarding D-O	17	-45	56	-48	-20	17	84
Per cent of variance							
	27.8	26.2	17.9	9.5	5.1	4.7	9.12

Table 17

Unrotated Powered Vector Factor Analysis Mothers' Self-Reports of Boy-Rearing Practices (N = 51)

Scales	Factor Loadings							
	A	B	C	D	E	F	G	Communalities
	LR	CD	O					
1. Protecting	-13	-72	43	35	-14	-35	07	99
2. Punishing S-L	-17	-74	-14	25	12	42	08	86
3. Rejecting	-67	-40	-28	04	09	19	39	88
4. Casual	-41	-02	-17	71	-24	06	-42	94
5. Rewarding S-L	20	-69	-58	08	-10	-12	03	89
6. Demanding	-21	-79	01	-01	29	15	02	77
7. Punishing D-O	-11	-73	-11	-33	40	-13	-25	90
8. Loving	78	-13	-35	-05	-06	-38	03	89
9. Neglecting	-93	-10	-17	-09	-06	-24	-08	98
10. Rewarding D-O	-29	-74	03	-45	-39	00	-02	99
Per cent of variance	23.1	34.4	10.2	8.0	5.2	6.0	4.1	91.0

Table 18

Unrotated Powered Vector Factor Analysis Mothers' Self-Report of Girl-Rearing Practices (N = 48)

Scales	Factor Loadings						
	A LR	B CD	C O	D	E	F	Communalities
1. Protecting	19	20	76	38	44	-02	99
2. Punishing S-L	-43	-65	23	-33	-29	-15	88
3. Rejecting	-92	-06	09	01	09	-02	86
4. Casual	29	08	72	-60	10	10	99
5. Rewarding S-L	44	-54	38	13	41	27	89
6. Demanding	-44	-47	22	45	05	39	82
7. Punishing D-O	-50	-68	22	23	03	-06	82
8. Loving	88	-27	19	-04	-01	-02	88
9. Neglecting	-95	01	05	-03	00	03	91
10. Rewarding D-O	19	-24	61	21	61	-33	99
Per cent of variance	34.9	18.1	15.8	9.3	8.4	3.7	90.3

Table 19

Comparison of Roe-Siegelman Harvard Sample with Boys and Girls Perception of Parents and Parents Self-Reports

	Fathers					Mothers				
	H	B/F	G/F	F/B	F/B	H	B/M	G/M	M/B	M/G
Rotated Factor A: Loving-Rejecting										
Loving	+80	+88	+69	+79	+94	+77	+83	+58	+76	+89
Protecting	+15	+42	+44	-30	-08	-04	+11	-02	-07	+04
Demanding	-18	+14	+07	-39	+20	-20	-04	-45	-21	-17
Rejecting	-77	-60	-48	-88	-64	-76	-69	-79	-65	-79
Neglecting	-80	-81	-88	-88	-84	-78	-85	-90	-93	-84
Casual	-15	-15	+15	-06	-20	+07	-07	+08	-30	+20
Rewarding S-L	+35	+82	+16	+18	+61	+32	+34	+17	+22	+62
Rewarding D-O	-02	+27	+10	-12	+14	+04	+20	+21	-35	+25
Punishing S-L	-26	-19	-01	-69	-12	-42	-12	-25	-12	-08
Punishing D-O	-28	-10	-23	-61	+11	-25	-17	-07	-15	-13
Rotated Factor B: Casual-Demanding										
Loving	+20	+21	+05	-31	-20	+25	-13	+08	-11	+11
Protecting	+005	-15	-04	-28	-16	-13	-50	-03	-76	+08
Demanding	-66	-87	-81	-76	-61	-74	-86	-54	-79	-65
Rejecting	-31	-62	-65	-11	-23	-33	-58	-44	-42	-48
Neglecting	+004	-44	-28	+09	+09	+02	-25	-21	-11	-43
Casual	+66	+26	+24	+15	+17	+72	+12	+47	-11	+04
Rewarding S-L	+06	-18	-02	-88	-56	-09	-21	+00	-69	-36
Rewarding D-O	-10	-21	-05	-37	-40	-08	-15	-00	-70	-26
Punishing S-L	-54	-65	-89	-34	-92	-48	-79	-56	-77	-81
Punishing D-O	-61	-84	-83	-28	-93	-55	-69	-99	-69	-86
Rotated Factor C: Overt Concern										
Loving	+21	+10	+38	-09	-23	-02	+30	+74	-18	+27
Protecting	+56	+47	+65	+45	+82	+59	+37	+86	+29	+80
Demanding	-09	-08	+03	+07	+17	+12	+04	+31	-07	+06
Rejecting	-18	-11	-14	+06	+36	-02	-10	-27	+09	-06
Neglecting	+04	+10	-23	+27	+04	-14	-02	-28	-03	-09
Casual	+15	+79	-05	+89	+87	-08	+81	+24	+75	+76
Rewarding S-L	+28	+17	+88	+14	+20	+55	+61	+83	-03	+34
Rewarding D-O	+15	+80	+87	+82	+60	+22	+82	+79	-48	+58
Punishing S-L	+17	-03	-12	+05	+08	+14	-05	+02	+19	+04
Punishing D-O	+12	+19	+23	+11	-05	+20	+20	+12	-39	+01

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